

FOR ACHEs AND PAINS.

ELLIMAN'S UNIVERSAL EMBROCATION

"An Excellent Good Thing!" One Shilling and Three Halfpence.

"AND IT I WILL HAVE, OR I WILL HAVE NONE."—*Taming of the Shrew, Act IV., Sc. 3.*



CUTTING

ELLIMAN'S UNIVERSAL EMBROCATION

For Human Use under 1/- and 2/4, and

ELLIMAN'S ROYAL EMBROCATION

For Horses, Cattle, and Dogs under 1/9, 2/2, and 3/-,

Can only be done by signing an agreement not to do so and then breaking faith, or by a Wholesaler supplying ELLIMAN'S EMBROCATION without first requiring an agreement to be signed, as all Wholesalers are pledged to secure agreements from every purchaser not to sell retail under the above prices.

Information respecting prices must be supported by evidence, viz., a received bill.

We engage not to disclose the names of those giving evidence upon the subject of

CUTTING

Address—ELLIMAN, SONS & CO., SLOUGH, ENGLAND.

WHY DON'T YOU

Sell our COFFEE ESSENCES? They will never disgrace you (like the cheap and nasty imitations of them), as they are Pure and Strong; and thousands of persons—who also use ground coffee—always keep a Bottle of our Essence for a ready cup, or for flavouring purposes. They go well with other goods, and our previously large sales have been doubled within the last few years entirely by the co-operation of sensible tradesmen at home and abroad, notwithstanding attempted imitations of our labels, the unprincipled use of our name, and the copying of our Advertisements and Circulars—the penalty a successful Firm always has to pay. Our Coffee Essences have now the largest Sale in the World.

SELL SYMINGTON'S "EDINBURGH" COFFEE ESSENCES,

which are prepared (under the personal superintendence of those possessing the necessary chemical and technical knowledge) from the Best raw materials, selected, roasted, and ground at our own Works.

Always good alike—Pure—Cheap—Quite clear—No trouble—No waste.

THOMAS SYMINGTON & CO., EDINBURGH AND LONDON.

If you do no business in our Goods, kindly show this to some friend who does.

14—GOLD AND SILVER MEDALS—14

Have been Awarded the following Specialties of

THOS. SYMINGTON & CO., EDINBURGH,

For Purity and Excellence of Quality:—

Essence of Pure Coffee	...	...	...	...	...	In 6d., 1s., and 2s. Bottles.
Do. Coffee and Chicory	...	...	...	...	...	In do. do.
Do. Dandelion Coffee	...	...	...	...	...	In 1s. and 2s. Bottles.
"Edinburgh" Coffee and Milk	...	...	...	...	...	In 1-lb. Tins.
"Edinburgh" Chocolate and Milk	...	...	...	...	...	In do.
"Edinburgh" Cocoa and Milk	...	...	...	...	...	In do.
Prepared Taraxacum (Dandelion)	...	...	...	...	...	In $\frac{1}{2}$ and $\frac{1}{4}$ lb. Tins.
Do. do. with Pure Coffee	...	...	...	...	...	In do. do.
"Pyramid" Malt Extract	...	...	...	...	...	In 8-oz. (fluid) Bottles.
Do. do. with Cod Liver Oil	...	...	...	...	...	In do. do.

THOS. SYMINGTON & CO., 61 LEADENHALL ST., E.C.

HEAD OFFICE AND WORKS—BEAVERBANK, EDINBURGH.

Fletchers' Concentrated Liquors

From "THE CHEMIST AND DRUGGIST," July 25, 1891.

"Exactly opposite the New Great Northern Central Hospital at Holloway stands the factory of Messrs. Fletcher, Fletcher and Stevenson, where at a few minutes after nine one morning last week we found Mr. F. W. Fletcher taking a promenade through an avenue of giant percolators, whence there issued a rhythmical "drip-drop" of the firm's "Liquors," in various stages of concentration.

"It seems needless to inquire," our Traveller remarked, "whether pharmacists are taking kindly to your Liquors."

"Well," said Mr. Fletcher, "we can scarcely keep pace with orders, although, as you see, there are hundreds of gallons of the Tincture Liquors alone in constant process."

"Did you find it difficult to overcome prejudice in favour of the old method of tincture-making?"

"Yes, at first," was the reply; "pharmacists, as a rule, are conservative in their notions: and this is a trait which has many advantages. But 'the old order changeth, giving place to new,' and the many who now use our Liquors thank us for showing them 'a more excellent way.' When we began to introduce our new Liquors they were a good deal pooh-poohed. People who had been accustomed to use a pint of spirit to exhaust $2\frac{1}{2}$ oz. of drug had come to believe that finality had been reached in tincture-making. But we had not embarked on our new enterprise without counting the cost. Here," continued Mr. Fletcher, pointing to several bulky volumes, "are the records of hundreds of experiments and estimations of results, all completed before we introduced our new series of Liquors."

"Without asking you to reveal trade secrets," said our Traveller, "may I take it for granted that your processes now go on as it were mechanically?"

"By no means," was the rejoinder. "We are continually revising, adapting, and improving. The only constant quantities are the proportion of drug and strength of spirit. One of the most mistaken ideas we have had to combat is the impression that our Tincture Liquors are prepared with spirit of all sorts of strengths. We strictly adhere to the standards laid down by the British Pharmacopœia, and hence, when diluted with the proper proportion of spirit, our Liquors yield tinctures of definite strength and density."

Mr. Fletcher then led the way to the laboratory, where two chemists were busily engaged in distilling trial samples of the Liquors, and taking specific gravities of the distilled spirit.

On referring to the laboratory note-book, our Traveller saw the analyses of between thirty and forty specimens of Liquors which had been examined during the current week.

"You will readily understand," continued Mr. Fletcher, "that it is of the utmost importance, for our own sake, that the strength of the Liquors should be very accurately determined, because it is from our Liquors we prepare tinctures for export, and samples of each shipment of the latter are taken by an Inland Revenue official for testing in the Government laboratory at Somerset House."

This led our Traveller to talk about the regulations for exporting medicinal tinctures and spirits under drawback—a facility of which Messrs. Fletcher, Fletcher and Stevenson have availed themselves extensively.

"It was owing to the urgent representations made by my firm," said Mr. Fletcher, "that the Excise consented to examine and sample tinctures for shipment on the exporter's own premises, instead of in a bonded warehouse at the docks."

Our Traveller's eye here happened to light upon a large card suspended from the wall, upon which were pasted the "Tincture Tables" published by Mr. Fletcher in THE CHEMIST AND DRUGGIST, and, on inquiry, learnt that these tables were referred to by different departments scores of times in a day.

"This," said Mr. Fletcher, producing what is technically known as the "Spirit Stock Book," "will best enable you to judge of the accuracy of the tables."

On looking through this official register, our Traveller saw, side by side, the number of gallons of proof spirit upon which drawback had been claimed and the number of gallons upon which drawback had been allowed. The figures agreed with surprising accuracy—the discrepancy in some 5,000 gallons of tincture not reaching one-tenth of 1 per cent.

"Have you any novelties on the way?" inquired our Traveller.

"Several," said Mr. Fletcher; "and, if I had not been recently bowled over with an attack of influenza, I should have introduced them to pharmacists in a 36-page inset in the Summer Issue of THE CHEMIST AND DRUGGIST."

"You found your inset last July answer your expectation, then?"

"Yes," said Mr. Fletcher; "it was one of the most attractive advertisements we have ever had. One order, for over 5,000 lbs. of tincture, directly resulted from it, and we must fairly credit it with some share of the year's general prosperity."

"Speaking of novelties," continued Mr. Fletcher, "here is a little instrument which I originally designed to meet a want in our own laboratory, but which we intend shortly to introduce to chemists for taking the specific gravities of their tinctures and spirits.

"As you are aware, it is essential in using an hydrometer that the liquid to be tested should be brought to the standard temperature of $15\cdot5^{\circ}$ C. Hitherto it has been necessary to employ separate instruments, a proceeding which was not only tedious and clumsy, but involved double risk of breakage. The hydrometers which I am now showing you are constructed from my own design, with a thermometer arranged as part and parcel of the instrument, and in such a way that the bulb of the thermometer comes into direct contact with the liquid, whilst the scales of both hydrometer and thermometer are placed side by side on the stem."

"The instruments are made so accurately that a correct reading may be taken to the fourth place of decimals. Of course the design is registered, and there is little doubt that the arrangement will be very popular with pharmacists who desire to check the sp. gr. of such things as spirit, aetheris nit., sal volatile, and tinctures generally. But please excuse me for a moment, as my private telephone is ringing, and I must speak to my partner at Mincing Lane."

What other scientific novelties our Traveller would have had to absorb we cannot tell. Our man was saturated, and took the opportunity of escape afforded by the telephonic conversation."

THE
LIVERPOOL SCHOOL OF PHARMACY
24 NEWINGTON, LIVERPOOL.

Principal—J. S. WARD, Ph. Ch., F.C.S., &c.

APRIL "PASS LIST."

MAJOR.

Mr. T. E. RIDDLE, Hexham. (Only one sent in.)

MINOR.

Mr. JNO. CLARKSON, Wigan.	Mr. R. B. LEE, High Ackworth
“ F. W. FOWLES, Liverpool.	“ JAS. MIDDLETON, London
“ C. E. JONES, Liverpool.	“ J. W. THOMAS, Beaumaris

JANUARY 'MINOR.'

Six sent in, 5 passed, viz:—

Mr. J. J. CLARKE, Liverpool.
“ J. A. RILEY, Seaforth.
“ E. D. JONES, Llanrhaidr.
“ W. LATHAM, Crewe.
“ W. WALKER, Leicester.

FEBRUARY 'MINOR.'

Six sent in, 4 passed, viz:—

Mr. R. G. BREESE, Merthyr
Tydfil.
“ R. C. COWLEY, Douglas.
“ B. C. LLOYD, Flint.
“ H. C. MORGAN, Liverpool.

Two-thirds of all these passed at their first attempt.
Mr. Riddle passed both the Minor and the Major from here at the first attempt.

The next full course of Lectures commences on Tuesday, September 1, 1891.

Syllabus, with Pass Lists, Fees, &c., sent post free on application to the Principal.

**THE CITY SCHOOL
OF
CHEMISTRY & PHARMACY, LIM.
27 CHANCERY LANE, LONDON, W.C.**

Session 1891-92 will Commence Tuesday, September 1st.

A Special Course for the October Examination (Minor) will Commence August 4th.

Revised Prospectus and full particulars on application to Mr. MAURICE WILLIAMS, Managing Director.

Now READY, PRICE 1s.]

SUPPLEMENT TO

[Now READY, PRICE 1s.

SQUIRE'S COMPANION TO THE BRITISH PHARMACOPÆIA:

A Commentary, Supplemental and Critical, upon the Recent "Additions" to the Pharmacopœia.

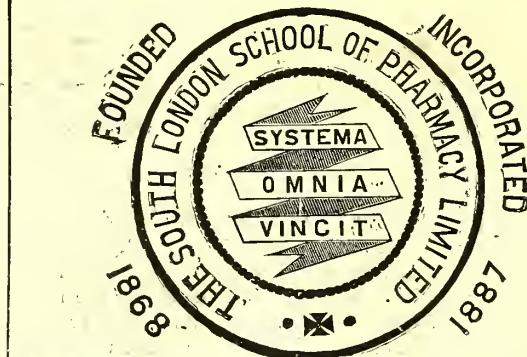
LONDON: J. & A. CHURCHILL, 11 NEW BURLINGTON STREET, W.

LONDON HOMEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD EBURY. Chairman—MAJOR WM. VAUGHAN MORGAN.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors. Clinical Instruction is given in the Wards and Out-patient Department to Medical Students, and the Hospital contains a valuable Library of Homeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.



325 KENNINGTON ROAD, S.E.

LECTURERS—

Chemistry, Physics, and Botany,

DR. MUTER, F.R.S.E., F.I.C., F.C.S.

Materia Medica and Pharmacy,

MR. DODD, F.C.S.

Analytical Chemistry,

MR. DE KONINGH, F.I.C., F.C.S.

Classics, and Mathematics and Mechanics,

MR. TOWNSEND, A.C.P. and London Mat.

Assisted by an efficient staff of Demonstrators.

The fees at this School are absolutely inclusive, and there are no extras of any kind. The Directors spare no expense in rendering the education thoroughly efficient and in maintaining the very high percentage of success uniformly obtained by the students for the last 20 years. The Dispensing department is most commodious and perfect, and no extra charge is made for its use.

The new Laboratory for practical instruction in Manufacturing Pharmacy is now in full work.

The School being usually full, intending students should secure their places beforehand.

For syllabus, &c., apply by letter addressed to the Secretary.

"CONCILIO ET LABORE."

**THE MANCHESTER COLLEGE
OF PHARMACY,**

225 & 227a OXFORD STREET, MANCHESTER.

See last week's Advertisement.

The Fees from September 1st to the December Examinations will be as follows:—

Full-time Class—Minor ..	£9 9s.
Major ..	£4 14s. 6d.
Local Classes—Minor ..	£2 2s. to £3 3s.
Major ..	£1 12s. 6d.

An Advanced Division of the Full-time Minor and Major Classes will be conducted for the October Examinations.

Full particulars given in the Copyright Prospectus, which will be sent to any address on application.



J. RAPHAEL & CO.,

THE CHEAPEST HOUSE IN THE TRADE FOR
SPECTACLES, FOLDERS, FIELD, OPERA, AND
MARINE GLASSES.



Repairs and Post Orders Despatched Same Day.

13 OXFORD STREET, LONDON, W.

THE NORTHERN SCHOOL OF PHARMACY,

100 BURLINGTON ST., MANCHESTER.

Principal: Mr. GEO. CLAYTON, Ph.C.

At the Examinations being held this month, Seventy-five per cent. of the Students who have entered from the Northern School (up to this date, the 29th) have passed.

The next Term commences on August 31st.
Entries are now being made.

PROSPECTUS ON APPLICATION.

CHEMICAL AND SCIENTIFIC APPARATUS.

J. ORME & CO.

(Late M. JACKSON & CO.),

Manufacturers and Importers of every description
of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and
Art Department, Royal School of Mines, Trinity House,
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ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN, LONDON, E.C.

FALLOWFIELD'S
PERFECTED "FACILE"
HAND CAMERA



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PHOTOGRAPHIC
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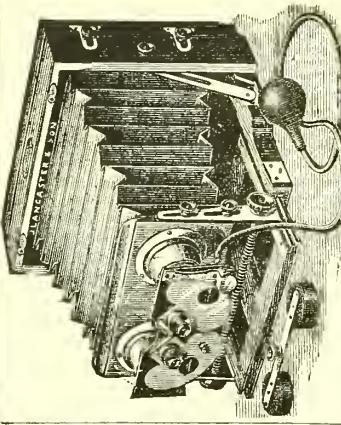
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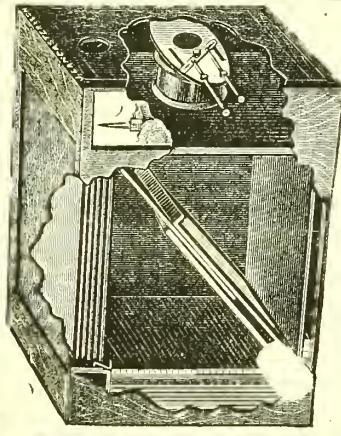
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THE 1891 "SPECIAL INSTANTOCRAPH" (PATENT).
BR. & S. BORND. 4 pl., 50/-.
4 pl., 100/-.
1 pl., 150/-.

THE STEREO-INSTANTOCRAPH (PATENT).
Belt Instantaneous Lenses, with Double Shutter and
Adjustable Diaphragm. Leather Belts, Adjustable
Swing Back, Back Adjustment, &c. 84/-.



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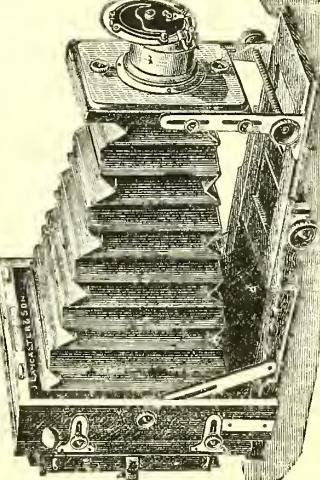
THE "OMNICRAPH" (PATENT).

Complete with Lens, Shutter, Finder, and
6 Metal Carriers for 1-p., 21/-.
Ditto, covered in Best Leather, 25/-.

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No. 1—31 x 12 Plates or Films.
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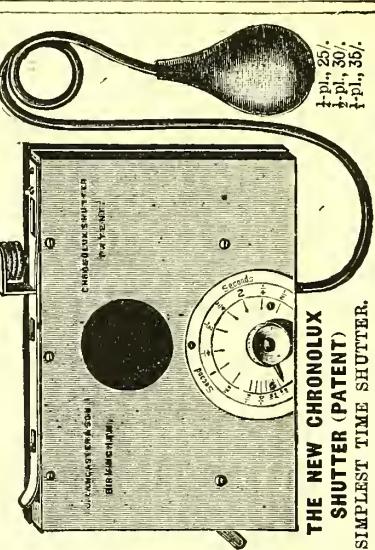
THE STEREO-INSTANTOCRAPH (PATENT).
Belt Instantaneous Lenses, with Double Shutter and
Adjustable Diaphragm. Leather Belts, Adjustable
Swing Back, Back Adjustment, &c. 84/-.



THE 1891 "INSTANTOCRAPH" (PATENT).
1 pl., 42/-.
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THE "IMPROVED SPECIAL" CAMERA, WITH
RECTIGRAPH LENS, &c. (PATENT).
1 pl., 150/-.
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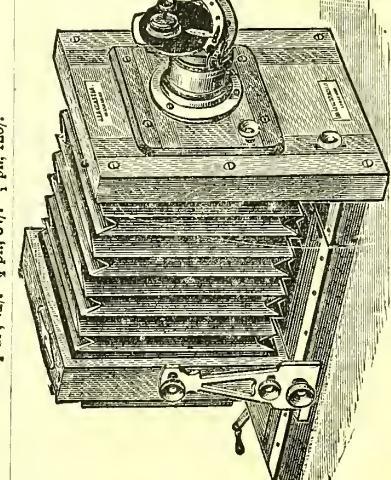
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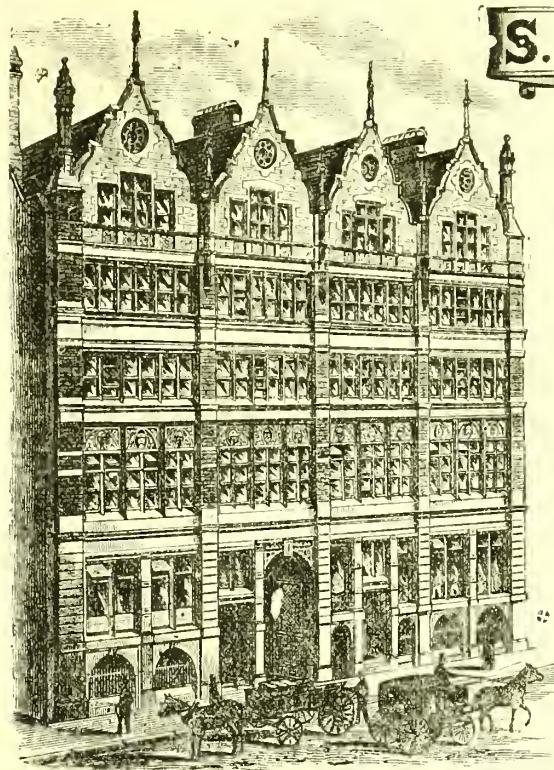
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1 pl., 60/-.
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SIMPLEST TIME SHUTTER.



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Price Current
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DRUGGISTS' SUNDRIES
OF ALL KINDS
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Forwarded Post Free to all parts of the World.

NEW ISSUE, 1891.

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PAPIER-MOURE.

Per 100, 2/. Per 1,000, 19/.

INSECTICIDE VICAT.

In Bottles - - per doz. **3/4 & 6/9**

In Bellows Boxes - - per doz. **3/4**

In ditto (Tin) , **6/9**

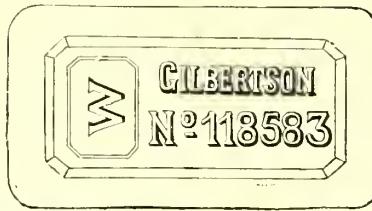
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ALDERSGATE STREET, LONDON.

SPECIAL NOTICE

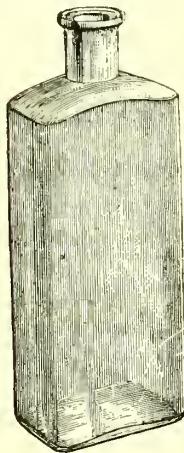
Being the Inventors of the Dispensing Bottles with rounded corners, we beg to call the attention of the trade to the fact that we supply this shape, now universally known as

GILBERTSON'S DISPENSING BOTTLE

made exclusively for ourselves by the Manufacturers of the **W** Brand, and this Trade Mark appears bottle, in conjunction with which is a guarantee uniform



on the bottom of each our Name and Number, of superior quality and excellence.



PRICES PER GROSS OF DISPENSING BOTTLES.

1	1½	2	3	4	6	8	10	12	16	20	24	32	40 oz.
10/0	10/0	10/0	11/6	11/6	12/9	12/9	20/6	20/6	23/6	30/0	35/0	44/0	53/0 GREEN
10/9	10/9	11/6	12/6	13/0	15/6	15/6	24/0	24/0	27/0	34/6	44/0	60/0	69/6 WHITE

IN CRATES (about 6 Gross Assorted).

Not less than 1 gross of a size.

1	1½	2	3	4	6	8	10	12	16	20	24	32	40 oz.
9/6	9/6	9/6	10/9	10/9	11/9	11/9	19/0	19/0	21/6	27/0	32/0	41/0	50/0 GREEN
10/3	10/3	11/0	12/0	12/6	14/9	14/9	23/0	23/0	26/0	33/6	41/0	56/9	65/0 WHITE

CRATES AND CARRIAGE FREE.

Casks for EXPORT are charged, but delivered F.O.B.

NAME PLATES EXTRA, AT USUAL RATES.

DISPENSING.

N.B.—All sizes and graduations supplied, either in Medical Blue Tint or White Flint, from stock in London, on receipt of orders. Also in Crates, direct from Works, Ten days afterwards.

This Bottle is made with rounded corners without altering its flat surfaces, which not only adds to its appearance, but reduces breakage to a minimum, *ensuring accurate capacity, simplifying labelling, and producing a perfect appearance when wrapped.*

ANY OF THE ABOVE BOTTLES ARE SUPPLIED WITH FLAT, GLOBE, OR CUT GLOBE STOPPERS.

ALSO MADE IN ACTINIC GREEN AND AMBER SUITABLE FOR SPECIALITIES

IMPROVED SALINE.

MEDICAL TINT

4 6 8 oz.

16/9 20/0 20/0

per gross.

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Telegraphic Address—“FRANGIPANI LONDON.”

BUSINESS POLICY.

THERE are a great many Chemists who immediately bring out an imitation of any goods as soon as they find that these goods command a fair sale. There are a large number whom we have in mind, who formerly made very good exhibits of our goods in their windows, and have now their windows filled with imitations of "Vinolia" Soap. True, in many cases, the name is not the same as, and would not be likely to be confounded with, the word "Vinolia." But as a rule the shape of the cakes is the same, and though the boxes are not often likely to be mistaken for "Vinolia" Soap boxes, yet the design of the tradesman is so plain that "he who runs must read." As a rule the man has his own name upon the soap, his name also appears upon the boxes, and, by watching carefully his opportunity, with a reasonable amount of trade, he can, no doubt, succeed in disposing of a small amount of soap in the course of a year. He may perhaps occasionally succeed in inducing people who want "Vinolia" Soap to take a box of his and try it. Now, we ask, is this a profitable course for a chemist to pursue, looking at it simply from the point of £ s. d.? We took proceedings against a well-to-do chemist in Northumberland a few days ago, and received by the next post a whining, complaining letter, telling us that he did not know his soap was an imitation, and that he had brought it out to oust one of our competitors from the field. If to oust someone else, why not us? Upon reference to our books we find that he was doing a very good business in our preparations. His design was to supply his own goods where ours were wanted. Now, even supposing that he had succeeded as well as one could expect when dealing with people who want what they ask for, how would his returns compare with those he would realise off twelve months' business done with us? We keep that man's neighbourhood well worked, and we see that there is a good, steady, growing demand for "Vinolia" preparations in it. No matter how well he pushes his goods, it will be some years before he can hope to have such a demand for his imitations in his locality as we already have for ours. Meantime, instead of co-operating with us, he is simply displaying a large amount of his energy in trying to neutralise our work, or, in other words, to proselytise our customers. From a scientific standpoint he cannot possibly hope to be in it with us. The man who manufactures in a small way, or orders goods in a small way, cannot successfully compete with high-class specialists in a large way of manufacture. From whatever way one looks at it, the policy is a bad one. The dealer who co-operates with us can do well, and can substantially increase his profits. In the course of a twelve-month the man who imitates us, and tries to supply our customers with his goods, drives many elsewhere who would buy "Vinolia" Preparations from him if he showed them, makes all further co-operation on our part with him impossible, and simply hurts his own business in the eyes of respectable people, who must not be considered totally blind. Further than this, there is a growing impression among the people that certain chemists make a business of imitating all successful preparations, and that the imitations about as much resemble the original as "a monkey resembles a man." Many a man alienates a customer by inducing him to buy one of his own preparations instead of that he asked for, and which afterwards fails to give satisfaction.

We do not ask anyone to co-operate with us, but we do ask that those who do not will refrain from co-operating with unscrupulous people to launch counterfeit "Vinolia" Preparations on the market in order to injure us. Such co-operation is a direct invitation to broken-down firms to endeavour to resuscitate and reinstate themselves at our expense. Every article of ours sold nets the retailer a substantial profit, and we have not on our list a single product in which any chemist may not do a very handsome business in a twelve-month. Our last week's offer of £2 still holds open. We are proceeding against those who have infringed upon our rights in every case that we have been informed of.

BLONDEAU et CIE., RYLAND ROAD, LONDON, N.W.

EXCHANGE COLUMN.

This Section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.
Remittances payable to EDWARD HALSE.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of $1\frac{1}{2}$ d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays $1\frac{1}{2}$ d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is quoted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin's Bank (Limited)."

FOR DISPOSAL.

Drugs and Chemicals.

Quantity of drugs in bottles, parcels, &c.; also small stock of a chemist; 3*l.* the lot; on view. Natali, 134 Aldersgate Street, London.

Formulas.

Genuine recipes:—Butter colouring, liquid annatto, weed-killer, arsenical sheep-dip, carbolic sheep-dip—3*s.* 6*d.* each. 266/39.

Proprietary Articles.

Bradbury's sheep-dip and Dobson's black leg drinks, half price. Wanted, gilt mortar for outside. Lockwood, Otley, Yorks. Surplus Stock.—2 dozen Woodcock's wind pills, $\frac{1}{2}$ dozen Locock's wafers, 1 dozen Nurse Lilly's female pills, $\frac{1}{2}$ dozen Clayton's pills, $\frac{1}{2}$ dozen Kay's restorative pills, all 1*s.* 1*d.* size, new, clean, and saleable; the lot for 25*s.*, post free Inglis, Drug Stores, Cornholme. What offers for whole or part?— $\frac{1}{2}$ dozen Watson's castor-oil pills, 1*s.* 1*d.*; three 4*s.* 6*d.* Pepper's quinine and iron tonic, and five 2*s.* 9*d.* ditto; two 2*s.* 9*d.* Kay's linseed; two 2*s.* 9*d.* Godfrey's elder flowers; one 4*s.* 6*d.* Rowland's kalydor; two 1*s.* Nestle's food; two 7*d.* Roper's plasters; two 1*s.* 1*d.* Roper's pills; two 1*s.* 1*d.* Burgess lion ointment; two 1*s.* James' herbal pomade; one 2*s.* 9*d.* Ford's balsam; seven 1*s.* 1*d.* Morrison's pills. Wright, Chemist, Kirkwall, Orkney.

Shop Fittings.

Show-cases, shop-fittings, carboys, shop-rounds, ointment-jars, utensils of every description; selling off; lease expiring. Natali, 134 Aldersgate Street, London.

About 100 shop bottles, various sizes, fair condition, 6*s.* per dozen; 2 specie-jars, gilt top-labelled Peruvian bark and magnesia; mahogany stands, clear glass, 2*l.* the pair; 2 outside reflecting lamps for window-fittings complete, 1*l.* the pair; 1 dozen 4-ointment-jars, 18*s.*, or 6*l.* the lot. Soungate, 4 Crondall Street, N.

Counters, two with plate-glass fronts, price 10*l.* 10*s.* and 6*l.*; range of drawers, with glass labels and knobs, dispensing-screen, five large carboys, sponge-case; counter-case, as Maw's 1A8, 6*ft.* long, 5*ft.* 10*s.*; tooth-brush case, 35*s.*; and a large quantity of other fittings, second hand, very great bargains. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Miscellaneous.

Three pockots Sussex hops, 7*d.* per lb.; any quantity sent. Potts, Ilkeston.

Gazogene charges, 5 pints; what offer? Williams, 123 Granby Street, Liverpool.

Glass displacement apparatus, quart, Maw's fig. 53, new, 18*s.* packed. 266/40.

Siphon account-book, best and simplest in the market, 2*s.* 6*d.* each. Williams, 123 Granby Street, Liverpool.

Surplus cigars, Havana and Mexican, cheap; also a few old Indians. Write for prices to Christopherson, Swaffham.

Few dozen British wines, 7*s.*; sundry patents; Morrell's ink; 10/100 choice cigars, 25 per cent. under cost; complete mahogany fittings, bottles, &c. Slater, Beeston Hill, Leeds.

Waterproof mattress, 5*ft.* by 3*ft.*, as Maw's fig. 183, good condition; what offers? 1*l.* 10*s.* Chemist, Oldham.

Pulvermacher's galvanic chains, for local or general application, perfect condition, cost five guineas, price 2*l.* 10*s.* Palmer, Chemist, Oxford.

One old bell-metal mortar, marked "John Partridge, 1713," round middle, weight 70 lbs.; what offers? Smith, Chemist, Yeovil.

One eight-iron tincture press, 2 large marble mortars and pestles, soda-water stand, 2 specie-jars, all half cost, or exchange. Radelye Cottage, Middleton, Lancashire.

Circular I.R. cushion for sloughing of serum (horse-shoe shape), as Maw's fig. 177, page 167, 25 by 18; Hooper's I.R. air and water cushion, 20 by 20, with pipe; both quite new; offers requested together or separate. Chifney, Mildenhall, Suffolk.

WANTED.

Bradbury's dip, in good condition; state lowest price. 270/30.

Eight-foot case-fronted dispensing-screen; 3-gr. pill-machine; tooth-brush case; cheap. 269/41.

Jars, bins, bottles, drawers, for storing chemicals &c., in warehouse. "Celandine," Hereford.

A large second-hand marble mortar; state size and price. L., 14 Bunhill Row, E.C.

2, 4, 6, and 12-gallon bottle-shaped oil tins, sound. Say number and price, to Skelton, Eastwood, Notts.

Address Wanted.

Wanted to know address of Louis Caspar, other wise Louis Charles Von Caspar, clerk, &c., a German, supposed now to be at Cardiff, 89/31.

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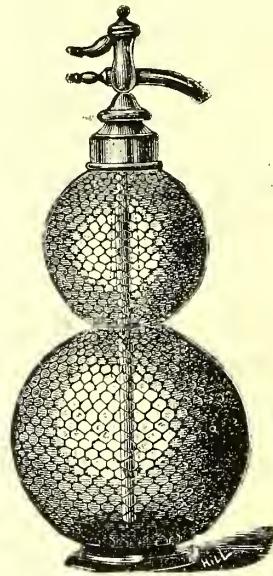


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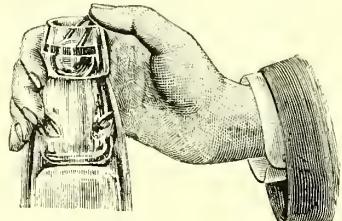
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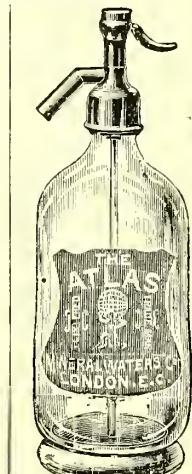


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It is now two years since it was our privilege to inform the trade that we had started a factory in Messina, for the manufacture of the above article. As we fully expected, our bold venture caused our competitors, both here and elsewhere, to raise an opposition against us of a most bitter, unfair, and unscrupulous character. We venture to think that nothing could have been more satisfactory to ourselves that this opposition was raised, for, instead of doing us the injury that was intended, it has been the means of drawing the attention of buyers to our article, thereby causing a considerable number of Consumers with whom we had not hitherto done business to consider the advisability of trying our quality, with the result that they have found it, as we have so emphatically stated on previous occasions, of **vast superiority over anything that has been shown on this or any other market.**

We can boast of a success in our "**W. J. B. SPECIALITY ESSENCE OF LEMON**" such as we did not dare to anticipate, our sales during the last season having far exceeded our calculations. But the point upon which we are specially elated is, consumers are more and more becoming fully acquainted with its superiority, and those who have hitherto purchased the lower qualities from us and others, after due examination, are one by one being convinced of its advantages and converted to its use. What then are its great qualifications? Simply that it is made carefully and well, from **SELECTED FRUIT ONLY AND ABSOLUTELY PURE.** Although somewhat higher in price than the qualities usually called "the best," its greater strength makes it cheaper in use, imparting, at the same time, a far superior flavour.

With regard to the ordinary commercial qualities, we claim also to be exceptionally placed; being on the spot we are enabled to take advantage of favourable markets.

Finally, we wish to mention a few words on the prospect of the crop, which, we regret, does not seem at all brilliant at present. Our friends will no doubt have seen, by our various market reports, the crop of lemons is now ascertained to be unusually limited, and the quality of the fruit being exceptionally good, a larger quantity than usual will be used for packing. Therefore, in the absence of "refuse lemons," from which the ordinary Essence is made, both Essences and Lemon Juice must be dearer as the season advances; anything like a repetition of last year's figures is out of the question.

We have received overland by Grande Vitesse a small copper, the first manufactured this season at our works, Villaggio Gazzi, Messina, and the exceptional quality of the fruit this year will enable us to offer a **PERFECT ARTICLE.**

One of our partners is in Messina as usual, superintending the manufacture.

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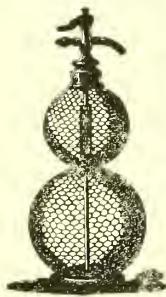
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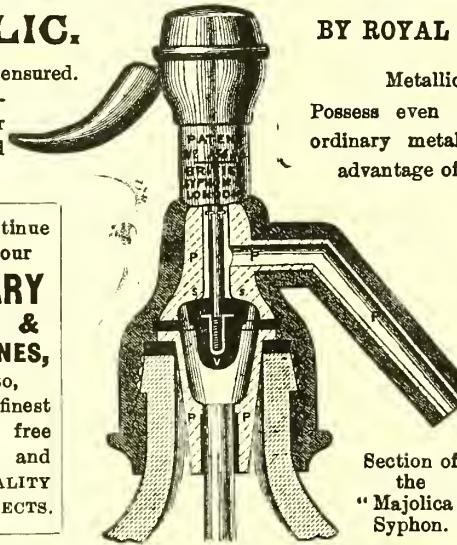
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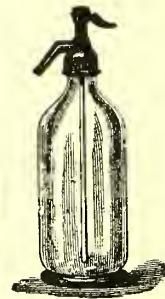
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GOLD MEDAL, Amsterdam, 1883. DIPLOMA OF HONOUR, Paris, 1887



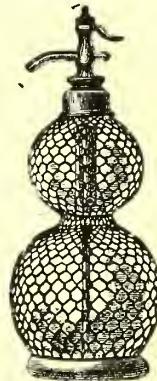
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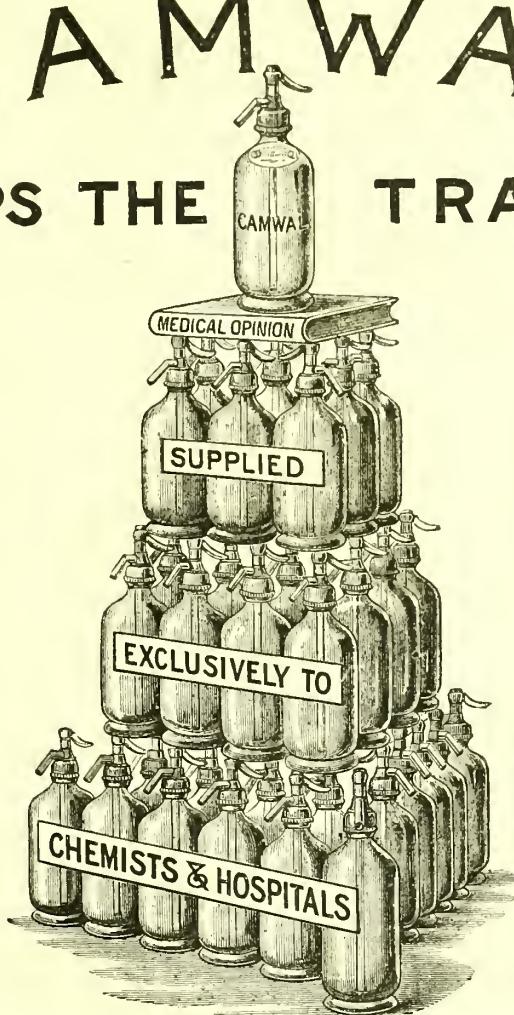
Year	No. of Members	Dividend
1878	119	None
1879	250	None
1880	430	None
1881	540	None
1882	615	2 <i>½</i>
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Potash .. B.P. 15	1/-	1/8	Iron and Quinine Water	1/8
Seltzer	1/-	1/8	Mineral Acid	1/8
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Siphons, 24s. per dozen.	Cases—3 dozen 3s. 6d.; 4 dozen 4s. 6d.; 6 dozen 5s. 6d. each.		Empties allowed for at same prices.	
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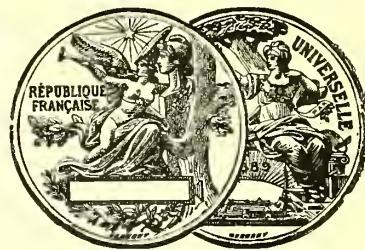
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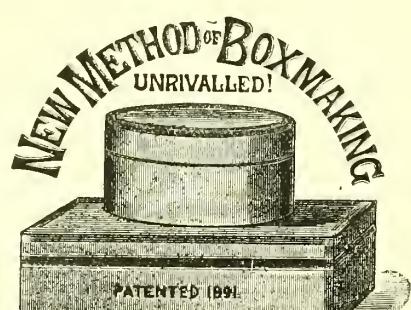
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As supplied to the Admiralty, War, and India Offices.

1-lb. Jars.....	per lb. 6/9 per doz. 81/0	2-oz. Jars.....	per lb. 7/8 per doz. 11/6
2-lb. Jars.....	" 7/0 "	42/0	1-oz. Jars.....	" 8/4
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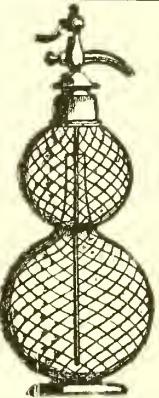
(See THE CHEMIST AND DRUGGIST, June 13, 1891, page 822.)



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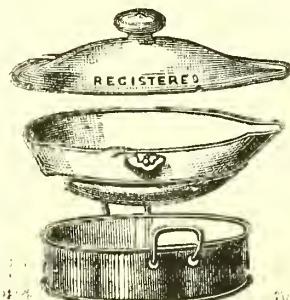
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" 1/-	4/6
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Double Ball.

No.	Description.	Per doz.
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72	Amber or Blue	30/-
47	Opaque, Buff	31/-
173	Rainbow colours	31/-
177	Clear Fancy Out	39/-
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100	"	44/6
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PUMP SPRAYS, 2/- per doz.

Single Ball Sprays.

No.	Description.	Per doz.
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144	China	21/6
172	Blue Glass	30/-

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Per doz.

Cheap Watch	2/6
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Octagon, Plain, 3473	4/-
Square, Well Cut, 10938	4/-
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" Well Cut, 7840	7/6
Octagon, Small, 9076	3/3
Also Coloured Bottles, &c., in great variety.	

SPONGES ON CARDS.

HONEYCOMB or TURKEY.

PERFUME SPRINKLERS,

HAIR WASHES, CREAMS,
OILS, INKS,

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THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,
12 PALL MALE EAST, LONDON, S.W.

SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and
source quoted. Tubes, two-thirds full, 1s. 8d. each; Tube one-third full and last
part charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small
Pomade, 1s. 8d. each; Half Tubes, 1s. 8d. each. Price per tube, 1s. 8d. (not
bottled), in quantities for export, 2s. per 100 Tubes. Pin-points uncharged, 1s. per
dozen. Vaccine Electors, 1s. 3d. each, including postage. Vaccinations by appoint-
ment. P.O.O.'s (including postage, and crossed London and Westminster Bank)
will order, payable to

EDWARD DARKE Secretary.

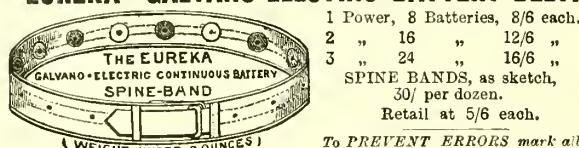
Office hours, 10 to 4. Saturday 10 to 2.

VINCENT WOOD'S INVENTIONS.

TRUSSES.

Ask your Wholesale Dealer for my quality 1 Speciality
Truss in Moleskin and Bazzil. Colours—Buff, Dove, and
Pink. Per doz. Single, 11/6; Double, 18/6.
Sizes to 40 inches. Springs warranted.

"EUREKA" GALVANO-ELECTRIC BATTERY BELT.



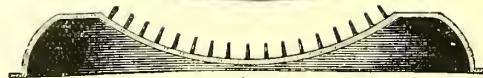
1 Power, 8 Batteries, 8/6 each.
2 " 16 " 12/6 "
3 " 24 " 16/6 "
SPINE BANDS, as sketch,
30/- per dozen.
Retail at 5/6 each.

To PREVENT ERRORS mark all
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MANUFACTURER OF SURGICAL APPLIANCES,
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THE NEW PATENT CHANGE DISH



From the above woodcut, which represents the most recent idea yet placed before the public, it will be seen how much better this article will answer its intended purpose than anything of the kind yet invented. It is made of metal, elegantly ornamented with neat designs in colours, the concave part (so made that the coins can be easily grasped) being studded with little rubber points, which are easily replaced should any get worn. This Change Dish is readily handed to a customer, and its use being plainly printed upon it, customers will understand its presence and put their money on it instead of all over the counter. The rounded edge provides a particularly striking means of advertising any speciality.

PRICE 3/6 EACH.

Of all Sundries Houses, or direct from the Manufacturers—
DAVID MOSELEY & SONS,
14 ALDERMANBURY AVENUE, LONDON, E.C.
Ardwick, Manchester; and 57 Miller Street, Glasgow.

BARCLAY & SONS, LTD.**SHILLING THERMOMETERS**

On Cards, half-dozen assorted, per doz., 7/-

BATHING CAPS, 4/6 doz.

(A line to compete with the Drapers).

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(1 dram Pill Boxes, 3d. per gross, &c., &c.)

**THE BABY CARRIER (Patent).****Retail Price, 2/6 each.**

This indispensable article should be stocked by all Chemists. It prevents the possibility of the child being dropped, and greatly relieves the nurse. Invaluable at seaside. Weighs under **THREE OUNCES**, and can be carried in the dress pocket when not in use. Is strongly recommended by the Medical profession.

SHOW CARD & CIRCULARS SENT WITH EACH DOZEN.

S. T. MATTHEWS & CO.

8 JOHN BRIGHT ST., BIRMINGHAM.

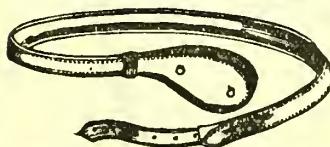


Fig. 1.

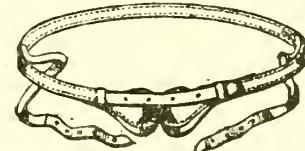
TRUSSES.

Fig. 2.

H. M. COLWELL'S TRUSS WORKS.

116 NEWINGTON CAUSEWAY AND YORK STREET, LONDON ROAD, S.E.

REDUCED PRICE LIST NOW READY.

Mailed Free with Samples to any address.

MAKERS OF THE NEW COLONIAL TRUSS, PROTECTED UNDER THE PATENT ACT.

Wholesale and Export Buyers only.

Established 55 years.

VOGT'S FRUIT EXTRACTS, from FRESH FRUIT. The best for Summer Drinks—Raspberry, Strawberry, Lemon, Orange, Cherry, Black Currant and Coffee, 5s. lb. net.**VOGT'S CITRATE OF MAGNESIA.**—Four qualities, 8d., 10d., 1s., and 1s. 2d. lb. net.**VOGT'S INSECT POWDER.**—Genuine Dalmatian from Closed Flowers, 1s. 3d. lb.; 100s. cwt. keg; special quality from Mountain Flowers, 1s. 7d. lb.**VOGT'S OLD-FASHIONED SCENTS.**—The Popular Favourites. You should stock them—"The Scent of the Moorland," "The Scent of the Hayfields," "The Scent of the Lilies."**VOGT'S DRUGS, PERFUMERY, CHEMICALS, & ESSENTIAL OILS ARE ALWAYS GOOD VALUE.**PRICE
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FREE.**G. VOGT & CO.,**

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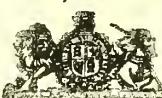
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ESTABLISHED A.D. 1709.

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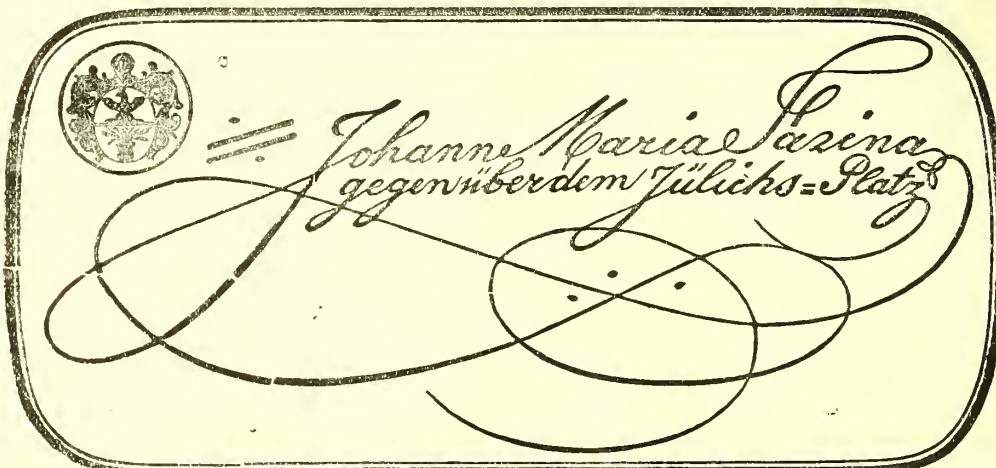
By appointment, Sole Purveyor to Her Most Gracious
Majesty Victoria, Queen of Great Britain & Ireland;
Their Royal Highnesses the Prince and Princess of
Wales; Albert II., King of Saxony;



Their Majesties, William II., German Emperor and
King of Prussia; Alexander II., Emperor of Russia;
Francis Joseph, Emperor of Austria; Lewis, King
of Portugal.

In consequence of increasing inquiries from the Colonies for my Eau de Cologne, the only genuine, I
beg to submit my Price Current.

At the same time I beg to call special attention to the following facsimile of my Trade Mark for the
protection of which I have instituted thirteen suits in the High Court of Chancery, all of which have been
decided in my favour.



All similar Labels being more or less imitations of the same, I shall proceed as before against all persons
selling or exposing for sale any such imitations.

I only prepare one quality of Eau de Cologne. This quality never varies in the slightest degree, and there
has not been the smallest change in the manufacture since the year 1709, when it was invented by my ancestor.

Orders equal to at least 12 dozen short bottles will be promptly executed at 13s. 6d. per dozen, against my
bill drawn at three months from the date of invoice, delivered free on board the export ship, at Rotterdam,
Antwerp, Hamburg, or Bremen, no charge being made for the case and packing, but insurance charged extra.
7½ per cent. discount is allowed for orders equal to at least 100 dozen, but on no smaller quantities.

I may add that, as I do not draw on the Colonies, all Orders must be accompanied by a credit on some
London House, or permission to draw on same at three months.

The Goods can also be shipped in transit through London at a very small additional expense, full particulars
of which may be obtained of my Sole Agents for Great Britain and Ireland:—

MESSRS. J. & R. McCRAKEN,
No. 38 Queen Street, Cannon Street, London, E.O.

The following are the sizes of my bottles:—

No. 1. Long Green Flasks	—	—	—	—	—	—	12 bottles
" 2. Short White Bottles	—	—	—	—	—	—	12 "
" 3. Double ditto	—	—	—	—	—	—	6 "
" 4. Wickered Bottles (small)	—	—	—	—	—	—	8 "
" 5. ditto (medium)	—	—	—	—	—	—	4 "
" 6. ditto (large)	—	—	—	—	—	—	2 "

} to one dozen.

JOHANN MARIA FARINA

OPPOSITE THE JULICHS PLACE.

COLOGNE: January, 1891.

SOLUBLE "TABLOIDS" OF COMPRESSED DRUGS.

B. W. & Co. are the sole makers of the only original and genuine "Tabloids" of Compressed Drugs, as prescribed by the medical profession throughout the world, and as supplied to H. M. STANLEY and other great explorers and travellers (*vide* published reports).

CAUTION.—Be not misled into taking any imitations of the genuine "Tabloids" of Compressed Drug.

Write for price lists and samples of disintegrating "Tabloids" of insoluble or sparingly soluble Drugs.

B. W. & Co. were the first to place these products upon the market.

"VAPOROLES."

For Inhalation and Fumigation; put up in boxes of one dozen, consist of glass capsule, enclosed in beautiful silken sac, 24/ per dozen boxes, each containing 12 Vaporoles.

1. Vaporole Carbolic Acid, 20 minims.
2. Vaporole Ether, 30 minims.
3. Vaporole Amyl Nitrite, 5 minims.
4. Vaporole Tinct. Phenzoic Co., 30 minims.
5. Vaporole Chloroform, 30 minims.
6. Vaporole Creosote, 10 minims.
7. Vaporole Cubeb and Lemon, 5 minims.
8. Vaporole Iodine Tinct., 10 minims.
9. Vaporole Juniper, 2½ minims.
10. Vaporole Terebene, 10 minims.
11. Vaporole Pinol, 10 minims.
12. Vaporole Eucalyptia, 10 minims.
13. Vaporole Amyl Nitrite, 3 minims.
14. Vaporole Oil. Pin. Sylvestris, 5 minims.
15. Vaporole Oil. Cynam. Aromat., 1 minim.



HYPODERMIC "TABLOIDS" (prepared by Burroughs, Wellcome & Co.) SOLUBLE, PERMANENT, PORTABLE.



"The little Giant Armamentarium."—*Edin. Med. Journ.*

The Hypodermic "Tabloids" are soluble, of uniform activity, and keep perfectly. In solution, whether prepared with an antiseptic or not, most of the active principles quickly undergo change. All the alkaloids and glucosides are perfectly preserved in the "Tabloids," and may be quickly dissolved as required.

THE LANCET reports that "they are readily soluble, and not at all irritating." They present the advantages that the dose is always accurate, the active principle unchangeable, and that they are compact and perfectly soluble.

New formulae are being constantly added to the list.

Price 1s. per tube, or 12 tubes in leather case, with syringe, mortar, pestle, &c., needles, price complete, 15s.

PEPSIN "TABLOIDS"

Contain each a grain of Pure Pepsin (Fairchild)—an amount sufficient to digest 1,000 grains of egg-albumen. Pepsin, as too often given, exerts no activity, because without an acid. This has been taken into account in making the Tabloids, and they contain, in addition to Pepsin, a little acid with appropriate aromatics. They are extremely pleasant to take, and children eat them as readily as sweets. They do for the weakened digestive organs what they are unable to do for themselves. The action is pronounced, and the digestive assistance they give is generally immediate and complete. One point which should be borne in mind in giving Pepsin is that to continue its action the patient must drink a fair amount of water, for as peptones accumulate the action of this ferment diminishes, until it finally ceases altogether.

DOSE.—1 to 3 Tabloids after each meal, to be swallowed with water.

Supplied to the Trade in bottles of 25 and 100, at 14s. and 42s. per dozen.



KEPLER SOLUTION OF COD LIVER OIL IN MALT EXTRACT.

"Taste of the oil agreeably disguised, its nutritive powers greatly increased, and it is rendered easy of digestion."—*Brit. Med. Journ.*

Patients grow fat upon it when other forms of oil cause distress and pain.

KEPLER EXTRACT OF MALT.

A delicious concentrated, nutritious, digestive food for dyspeptics, invalids and infants. *The Lancet* says:—"It is the best and most largely used." The consumptive's best resort. It is the best substitute for cod liver oil.

The Kepler Extract of Malt and the Kepler Solution supplied to the Trade in bottles containing ½ lb. and 1 lb. at 20s. and 35s. per dozen. Supplied by all Chemists throughout the World.



HAZELINE CREAM.

Prepared with "LANOLINE," which absorbs 100 per cent. of Hazeline, forming a white, cooling, emollient Cream of remarkably soothing and healing properties. This preparation is considered by many medical practitioners to be superior to the ordinary Cold Cream of the pharmacies. As an application for piles, anal fissure, prolapsus ani, and irritable conditions of the anal membrane this Cream is unsurpassed. It may be cleanly and conveniently applied by means of the Ward Cousins Ointment Injector.

"Does not turn rancid, is devoid of free fatty acids, its action being pleasantly soothing and emollient."—*Dubin Medical Journal.*

Supplied to the Trade in 2 oz. bottles at 14s. per dozen, and in 1-lb. jars at 60s. per dozen.



ZYMINE PEPTONISING POWDERS (Fairchild).

One tube added to a pint of cow's milk so predigests it that it will no longer form a curd to irritate and inflame the infant or invalid stomach. They render cow's milk precisely like mother's milk. "The introduction of which has probably done more than any other therapeutic measure of recent times to lessen infant mortality."—*Brit. Med. Journ.* Admirably adapted for use with the Thermo-Safeguard Feeding Bottle.

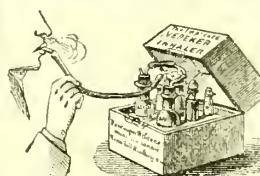
Supplied in boxes, one dozen tubes in box, at 14s. per dozen, boxes.

VEREKER'S IMPROVED INHALER.

The VEREKER AMMONIUM CHLORIDE INHALER is designed expressly for the application of neutral ammonium chloride vapour to the mucous membrane in the treatment of catarrhal and other affections of the nose, throat, trachea, bronchial tubes, and air-cells of the lungs.

It is the only Inhaler for constant use which will yield absolutely neutral vapour.

Price 5s. each.

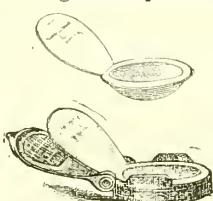


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Will be happy to send Price Lists to Pharmacists post free on request.

WAFER MEDICINE CACHETS (B. W. & CO.)

(E. GORLIN'S PATENT.)

An ingenious yet simple and ready method of taking disagreeable medicines in the form of liquid, powder, or "Tabloids." To charge a Cachet, which is composed of pure rice starch, it is spread out in the folder, as shown in the accompanying illustration, and the contents placed in the cap. The lid of the Cachet is then wetted and brought over by means of the lid of the folder. When pressed on the top of the cap it is completely sealed, and prevents an egress of the contents into the mouth. Just prior to taking the Cachet, it should be dipped in water and then placed on the tongue, and may be easily swallowed with a little water.



B. W. & Co. Water Medicine. 14s. per dozen, subject to usual discount.

The British Medical Journal says they are "well adapted for the administration of unpalatable powders or liquids."

The London Medical Recorder reports: "They will be welcome to medical men and their patients, and also to pharmacists, whose labours they will lighten."

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

HEARON, SQUIRE & FRANCIS

WHOLESALE AND EXPORT DRUGGISTS.

SPECIALITIES—"HERON" BRAND.

ESS. PRO MIST. FERRI CO. 1-7.

It has the strong odour and bitter aromatic taste of good quality myrrh combined with the fragrant smell of volatile oil of nutmeg.

EXT. EUONYMI LIQ. A reliable Hepatic and Intestinal Stimulant.

EXT. KOLÆ LIQ.

A strong Tonic and Stimulant to the Nervous System, a most successful remedy in Sea-sickness.

EXTRACT OF MALT IN VACUO.

Keeps perfectly, and possesses the characteristic flavour of malt.

EXT. SALICIS NIGRÆ LIQ. A powerful Sexual Sedative, similar in its action to Potassium Bromide, but without its depressing qualities.

EXT. SENNÆ LEGUMIN. LIQ. A non-irritating, tasteless, and certain Laxative in obstinate Constipation.

LIQ. IPECAC. PRO VINO. 1-19.

Contains 1½ per cent. of Emetine, and gives a Vinum Ipecac. that is bright, stable, and uniformly active.

PEPSIN GLYCER. ACID.

A strong solution of peptic principles of definite strength: a stable and digestive fluid of great activity.

SOL. PEPSIN C. EUONYMIN. A Biliary Stimulant and Digestive Agent of pronounced efficacy.

INFANTS' FOOD MALTED.

Supplied in bulk and in tins with plain labels.

CONCENTRATED SOLUBLE ESSENCES.

"The most delightful aroma, the finest flavour, and the highest degree of concentration."

FINEST CONCENTRATED FRUIT ESSENCES.

MANUFACTURERS OF EVERY CLASS OF PHARMACEUTICAL PREPARATIONS.

Telegraphic Address—"FRANCIS LONDON."

38 SOUTHWARK ST., LONDON.



ESTABLISHED 1859.

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MELBOURNE AND SYDNEY, AUSTRALASIA.

Published every Saturday.

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Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to **EDWARD HALSB**, and crossed **MARTIN'S BANK (LIMITED)**.For Australasian subscribers the subsidiary journal, **THE CHEMIST AND DRUGGIST OF AUSTRALASIA**, is included.Supplied regularly to every member of the following Societies, who have adopted **THE CHEMIST AND DRUGGIST** as their official organ.**The Pharmaceutical Association of New Zealand.****The Pharmaceutical Society of Queensland.****The Pharmaceutical Society of South Australia.****Tasmanian Pharmaceutical Society.****Otago Pharmaceutical Association.****South African Pharmaceutical Association.**

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SUMMARY.

A CANDIDATE who passed the "registered druggists'" examination at Belfast last month relates his experience.

AT the Tuberculosis Congress, held in Paris this week, Koch's tuberculin came in for some disparaging remarks.

AT Gateshead last Sunday evening the condensers in connection with the Friar's Goose Chemical-works hydrochloric-acid plant collapsed, and killed seven men.

THE local arrangements for the Cardiff meeting of the British Pharmaceutical Conference are now complete. Mr. Martindale visited the town last week to familiarise himself with it.

OUR Summer Issue—regarding which, by the way, we have received many flattering letters of congratulation—induced a curious dream, of which a correspondent gives an account on page 189.

IN our correspondence columns the discussion on the scarcity of assistants is continued, and there are several practical letters, including notes on Raspberry-vinegar and Whitworth Red Bottle.

A COMMITTEE of the Manchester Infirmary have reported on the recent deaths in that institution of surgical patients under operation, and completely exonerate the chloroform that was used.

THE man who stated that he had a secret for enhancing the weight of gold, and upon that ground endeavoured to obtain money from West-end jewellers, has been sentenced to three months' imprisonment.

THE drug markets have been quiet this week. There is a further development of the bromine war, and the American agents are being undersold by the German syndicate. The rapid rise in glycerine is also attracting attention.

SOME correspondence has passed between Mr. Wyatt, chemist, of Lancaster, and the local coroner regarding the sale of carbolic acid. The coroner partly withdraws the strictures he passed on Mr. Wyatt at the recent inquest, but still erroneously maintains that any poison must, according to the Pharmacy Act, be labelled "poison."

THE Board of Inland Revenue has issued a new general order regarding the preparation and retail sale of methylated spirits. On and after September 1 the spirits for sale must contain a certain proportion of mineral naphtha, and the Board take the power of requiring retailers to register sales under special circumstances. All present stock must be disposed of before the end of the year.

THE British Medical Association met at Bournemouth this week, and Dr. Thomson of that town delivered a presidential address on Bournemouth as a health resort, and on the necessity for systematic scientific supervision of sanitary matters. In connection with the meeting an exhibition of foods, drugs, and surgical appliances was held, which was well attended by the members. We give a very complete report of this.

OUR reports from the law courts refer to the endeavour of a firm to have the words "trade mark" removed from two marks which they have registered. This action is opposed by the Attorney-General, acting for the Comptroller. Three Leeds firms of grocers have been fined for selling coppered peas, and there was an action in the City of London court in regard to a liniment recipe, which changed hands for 100*l*. Hunyadi water again came into court last week, but the question in dispute had reference to the service of a summons on the French company, which is domiciled outside the jurisdiction of the court. This summons does not hold, Mr. Justice Sterling decided.

"VETERINARY COUNTER PRACTICE,"

CONTENTS:—Medical and Surgical Treatment of Domestic Animals; Veterinary Medicines; Miscellaneous Veterinary Formule; Diseases of the Horse; Lameness in Horses; Dentition of the Horse; Diseases of Cattle; Diseases of Sheep; Diseases of Pigs; Diseases of Dogs; Treatment of Eye Diseases; Wounds, Sores, &c., in Animals; Diseases of Poultry; Appendix.

This book may be obtained from either of our offices (42 Cannon Street, London, and Fink's Buildings, Melbourne), or from any of the wholesale houses, at 3*s.* 6*d.*; postage, 3*d.* extra.

Our other Treatises are:—

"The Art of Dispensing." (280 pages.) 3*s.* 6*d.*; by post 3*s.* 10*d.*

Alpe's "Medicine Stamp Duty." (142 pages.) 2*s.* 6*d.*; by post 2*s.* 9*d.*

Precott's "Pharmaceutical Testing." (176 pages.) 2*s.* 6*d.*; by post, 2*s.* 9*d.*

English News.

THE SANITAS COMPANY (LIMITED).—The directors of this company have declared an interim dividend at the rate of 10 per cent. per annum for the six months ended June 30 last, free of income-tax, and payable on or after September 1 next.

THE Cardiff Free Library Committee have accepted the offer of Mr. A. Coleman, hon. local secretary British Pharmaceutical Conference, to place a series of books of reference of a pharmaceutical, chemical, and botanical character in the reference department of the free library.

ALLEGED IMITATION OF SEQUAH MEDICINES.—At Cardiff Police Court on Wednesday, July 22, the adjourned summons against a medicine-vendor named Chapman for having sold, it was alleged, patent medicines—Sequa's Prairie Flower and Sequah's Oil—under a false trade-mark, and also for having falsified a trade-mark, was withdrawn, no evidence being offered.

FIRE.—On Tuesday afternoon a fire broke out on the new premises of Messrs. Hicks & Co., chemists, Queen Street, Cardiff. It was caused by the explosion of spirit in a number of bottles placed near a fire in the warehouse. Fortunately the assistants succeeded in extinguishing the flames before the arrival of the corporation brigade. The damage done was trifling.

CORROSIVE POISONING.—Last week Mr. Clarke Aspinall, the Liverpool coroner, held an inquest on the body of Ann Rathbone, aged 69, wife of a grinder, living at Everton. The woman, while intoxicated, had drunk a mixture of quicksilver, nitric acid, and water, which her husband used for polishing brasses, and she died in the Royal Infirmary the following day from the effects of the poison. She drank the mixture intentionally, so the jury returned a verdict of "Suicide."

CARBOLIC POISONING.—Last week Sarah Stephenson, a domestic servant in Liverpool, committed suicide by taking a quantity of carbolic acid. She was in a house in Schubert Road, Seaforth, at the time, and went out and purchased the acid, which she drank upon her return to the house. A quarrel with her lover was the cause of her trouble. An inquest was held on Friday last, when the evidence showed that deceased first sent out for carbolic acid, but a friend who suspected her object threw it away. She went out for more herself, and took it, dying fifteen minutes later.

SUICIDE WITH PHOSPHORUS-PASTE.—An inquest, relative to the death of Mary West (48), was held at Marylebone Workhouse on July 25. The deceased, a spinster, had been a general servant, and for the last four years she had been on and off an inmate of the workhouse. On Thursday morning she was found to be very ill, and when about to be removed to the sick-ward Miss Carson found in her comb-bag a bottle of rat-poison and some bread and butter on which was found spread some sugar and some of the phosphorus-paste. The woman died the same evening from the effects of the poison. The jury returned a verdict that "The deceased committed suicide whilst of unsound mind."

CHLOROFORM ANESTHESIA.—Last Saturday Mr. Wynne E. Baxter held an inquiry at the London Hospital respecting the death of James Bull, aged 35, a lighterman, late of 20 Arcadia Street, Poplar. Mr. Muir, house-surgeon, said deceased was recovering from an attack of bronchitis, and on Thursday chloroform was administered to him before an operation was commenced. The operation was not urgent, but the deceased was anxious to have it performed. Death took place shortly after the chloroform had been given, from failure of respiration. Witness could not account for the failure of respiration in this case. It was an unsettled question as to whether the lungs or the heart ceased to act first in cases of this sort. Verdict, "Death from misadventure."

ACONITE LINIMENT POISONING.—An inquest was held at Norwich, on July 28, on the body of William Woods, aged 51, of Prospect Place, who died on Sunday last, after drinking some aconite liniment, in mistake for other medicine. This

the deceased asserted before his death. Dr. William Leith, surgeon, Norwich Medical Institute, gave evidence as to attending deceased for influenza and lumbago, and as to supplying him with quinine and liniment of aconite. The jury returned a verdict to the effect that deceased died from poisoning by drinking aconite liniment, but there was no evidence to show whether he took it intentionally or by mistake; and added a rider to their finding, that an institution like the Medical Institute, when they issued such stuff, should use a more distinctive label.

WEED-KILLERS.—"We understand," says the *Gardener's Chronicle*, "that the Pharmaceutical Society has instituted proceedings against one of our leading nurserymen for selling these substances, or one of them, without having a licence to sell poisons. Considering the numerous accidents with these fluids, it is in the public interest that they should be retailed in bottles of peculiar shape, prominently labelled 'Poison.' The label should also state for what purpose only the liquid is employed. We do not think nurserymen or dealers in garden requisites would raise any objection to some precautionary measure of this kind. In these days of insecticides, to prevent nurserymen absolutely from selling these substances would be injudicious; but that some special precautions are necessary, is unfortunately too true."

FIRE.—A great fire occurred at the chemical works of the Wear Fuel Company, South Dock, Sunderland, early on Monday morning. It originated through the bursting of a naphthalin press shortly after midnight, and soon the whole of the works was in a blaze. At three o'clock in the morning hundreds of people were roused from their beds by the bursting of a large oil-tank. After this a great many explosions occurred as the fire caught the tanks containing naphtha, benzoline, tar, and other inflammable liquids. The flames spread over an area of 250 yards in length by 125 in width, and destroyed a warehouse filled with esparto grass, a train of loaded waggons, thousands of pounds' worth of stacked timber, and a jetty projecting into the sea. The flaming tar floated on the surface of the sea. The amount of damage is not yet ascertained.

THE COUNTY COUNCIL'S CHEMIST'S DEPARTMENT.—At the last meeting of the London County Council, the chairman (Sir John Lubbock, Bart., M.P.), presiding, Sir T. H. Farrar, chairman of the General Purposes Committee, brought up a report from his committee, stating that the Council on June 16 authorised the appointment of a second-class assistant in the chemist's department at the commencing salary of 150*l.* a year, the extra assistance being needed in consequence of the greatly increased quantity of analytical work, especially in connection with the examination of food and drugs. Having considered the various applications, the committee recommended Mr. P. A. Estcourt for the appointment, stipulating that he should not on retirement be entitled to any superannuation or pension, and that he should submit to any general scheme which the Council may adopt with respect to insurance for pensions. The recommendation was agreed to.

ALBERT MEDAL PRESENTATIONS.—At Marlborough House, on Monday, July 27, the Prince of Wales presented the Albert medal of the Society of Arts to Mr. W. H. Perkin, "for his discovery of the method of obtaining colouring matter from coal-tar, a discovery which led to the establishment of a new and important industry, and to the utilisation of large quantities of a previously worthless material"; and to Sir Frederick Abel, "in recognition of the manner in which he has promoted several important classes of the arts and manufactures by the application of chemical science, and especially by his researches in the manufacture of iron and steel, and also in acknowledgment of the great services he has rendered to the State in the provision of improved war material and as chemist of the War Department." The medal awarded to Mr. Perkin was for the year 1890; that to Sir Frederick Abel was for the present year. Mr. M. Carteige was amongst the members of the society's council afterwards presented to the Prince of Wales.

THE TURNIP CROP is seriously threatened in various parts of the country by an attack of the diamond-back moth caterpillar. Miss Ormerod, who has made the study of insect-pests a speciality, has issued a circular regarding the treatment to be adopted. This is mainly mechanical; but,

she adds, if boys were sent through the turnips to jar the leaves and throw lime (or any approved mixture) down, she thinks it would kill a good many. Quicklime and gaslime one bushel of each; soot, 10 lb.; sulphur, 6 lb.—is an excellent remedial dressing for some attacks. It should be reduced to fine powder, and all mixed up well together. It seems useless trying to apply any dressing to the leaves, for the caterpillars are sheltered below; hence even paraffin, which has been lately tried, has failed; but we may expect to do good by making the natural habits of these pests of use in throwing themselves out of their protection into our reach. In a later circular Miss Ormerod also recommends the use of strawsonisers with fluid dressings, such as nitrate of soda, soft-soap wash, or paraffin oil, or dry dressing of lime. She also recommends the use of the knapsack-pump for sending sprayings directly under the leaves.

FATAL ACCIDENT IN A CHEMIST'S SHOP.—An inquest was held on Friday, July 25, at Manchester, touching the death of a lad named George Coombes, 12 years of age, whose parents live in Bradford Road, Ancoats. The deceased was a shop-boy with Mr. Lambert, chemist and druggist, in Ashton New Road, Bradford. On Wednesday Mr. Lambert went into the scullery to get some varnish, and Coombes stood by to assist him. The varnish was kept stored in a tin drum, and in order to enable Lambert to draw some off in a stone bottle, Coombes, as the place where the drum was kept was very dark, held a lighted taper about a quarter of a yard away. An explosion followed, and both the lad and Mr. Lambert were terribly burnt. Coombes was conveyed to the Ancoats Hospital, where he soon succumbed to his injuries. Mr. Lambert was unable to appear to give evidence, but he told one of his assistants that the varnish was being spilt, and the lad was trying to save it when it caught fire from his taper. The jury returned a verdict of "Accidental death," and censured Mr. Lambert for gross carelessness in the matter.

THE PHILOSOPHER'S STONE.—At the Central Criminal Court, Old Bailey, on July 27, Edward Pinter (56), described as a chemist, pleaded guilty to attempting to obtain 40,000*l.* by false pretences from Mr. Edwin William Streeter, jeweller. Prisoner had represented that he was in possession of a secret by which gold could be increased by at least 90 per cent. As a preliminary to the success of the operation prisoner represented that it was necessary that the sovereigns should be soaked in acid for at least fourteen or fifteen days; and adding a black powder (the manufacture of which he alone was acquainted with) increased the value of the gold. The stench arising from the latter operation was so powerful that no one could remain in the room in which it took place. At Brighton the prisoner obtained 2,000*l.* by similar means. Prisoner, when arrested, was found in the possession of a quantity of black powder which was largely impregnated with gold. For the defence it was urged that there never was any chance of the prisoner obtaining any part of the 40,000*l.*, and the only reason that so large a sum was mentioned was because prisoner thought Messrs. Streeter would be offended if he asked for a small sum. The Recorder said he agreed that there never was the slightest chance of the prisoner obtaining the money. As the prisoner had been three months in gaol, and was in ill-health, he sentenced him to three months' imprisonment only.

SUICIDE BY CHLOROFORM.—An inquest was held on July 24, at Norwich, on the body of John Augustus Miles, aged seventy-three, a retired bank manager, of Prospect House, Clarendon Road, who died, after taking chloroform, on Thursday. Dr. Ross said he had been attending deceased for about a fortnight. Other doctors had also been in attendance. Deceased had been suffering from extreme nervous depression, and witness considered he was not responsible for his actions, and his death arose from the effects of chloroform, which he admitted having taken. On Thursday morning witness was sent for to go to his house. He went, and found him suffering from the effects of chloroform. Witness and Dr. Roche administered a strong emetic, which, however, did not act, as the deceased was in a dying condition. Witness had heard him threaten his own life, but, as it was in a jocular way, it did not alarm him, although he took every precaution. Witness did not know if deceased was in the habit of taking chloroform, and had no idea how

he obtained it. Deceased has for a long time past been a dabbler in medicine, and had various drugs in the house. He had been subject to paroxysms of great pain for some time past. Henry R. Edwards, an attendant on Mr. Miles, gave similar evidence, and the jury returned a verdict that deceased committed suicide.

THE TEACHING UNIVERSITY FOR LONDON.—On Wednesday the committee of the Privy Council, which have under consideration the proposed charter for the new university, met to consider certain points of detail which have yet to be settled before the charter is submitted to the Houses of Parliament. Lord Selborne intimated that the medical schools had accepted the position offered to them in the faculty of medicine, and, speaking regarding the names which have been suggested for the new university, said he thought "Albert University" would be the best. It is understood, however, that the medical schools have some objections to this title, and the matter cannot be regarded as settled yet. The medical schools which agree to enter the University are those of St. Bartholomew's, Guy's, St. Thomas's, the London, St. Mary's, Charing Cross, Middlesex, Westminster, and St. George's Hospitals, and the Medical School for Women in connection with the Royal Free Hospital. As previously stated, it has been decided by the Royal College of Physicians of London and Royal College of Surgeons of England to decline to be represented on the council of the University. The draft charter will now be reported to her Majesty; but it must lie on the table of both Houses for thirty days before her Majesty can issue her fiat, and this, at the end of July, entails a delay until next February at the soonest before the University will come into existence. At a meeting of the members of the Royal College of Surgeons, held on Thursday afternoon, steps were taken to get power in the University, if the Council thinks it desirable.

SERIOUS CHARGE AGAINST A CHEMIST.—At the Hanley Borough Police court, on Monday, Edward Watson Dixon, aged 23, who described himself as a chemist, living in Hanley, was charged with receiving large quantities of drapery goods, on various dates, knowing the same to have been stolen. At the same time, two youths, named John Sherratt (18) and Austin Yates (17), drapers' apprentices, were charged with stealing the goods from their master, Mr. Robinson, of Hanley. Mr. W. J. W. Heath prosecuted, and Mr. Sword defended Sherratt and Dixon. From the evidence of a woman named Emma Hulme, who keeps a public-house near Hanley, it appears that Sherratt and Dixon came to her house on June 23, offering to sell her a pair of blankets for 14*s.* She refused to purchase, but on their representation that they came from Bradford, and wanted to return early that evening, she consented to buy the whole of the goods they had in the large parcel they were carrying. Another witness stated that defendants had frequently brought parcels to her house. Mr. Robinson said he had missed goods very frequently of late, and put his losses at about 50*l.*; but the prisoners had assisted him to recover 21*l.*-worth of goods, and Sherratt had given up 8*s.* in money. He did not press the charge. Yates pleaded guilty, and Mr. Sword, who represented the other two, begged hard for clemency, remarking that Dixon was a young married man with family. The Bench, accepting the prosecutor's suggestion for clemency, did not send the accused to prison; but, taking advantage of a recent Act of Parliament, fined each of them 20*l.*, including costs, or three months' imprisonment in default.

EXCURSION.—On Saturday last the employés of Messrs. Potter & Clarke were favoured with splendid weather for their annual outing. About thirty of them travelled to Broxbourne, Hertfordshire, by train, arriving there shortly after ten o'clock. Only the principal male members of the warehouse, laboratory, and counting-house were present, and they were accompanied by Mr. Henry Potter, the senior partner, Mr. Wren, manager, and Messrs. Millard and Higgs, travellers. The forenoon was spent in a cricket match, the teams representing the warehouse and the laboratory and office. The warehouse team had it all their own way, and gave their opponents a thorough beating. Dinner was served at one o'clock, and after it Mr. Wren proposed, as a toast, "The prosperity of the Firm," Mr. Higgs also

speaking of the happy relations which exist between employers and employees. Mr. Henry Potter, in the course of his reply, indicated how greatly the business of the firm has progressed during recent years, and hinted that further new departures were in contemplation. During the afternoon the greater part of the company took to boating on the River Lea, some rowing as far up as Rye House, and returning by six o'clock, in time for tea. After this there was a little archery, and by half-past seven the tea-room was cleared for a smoking concert, which was in every way a success. At this Mr. Potter presided, and the different members of the staff contributed to the enjoyment of the evening. An exceedingly happy day was spent, and THE CHEMIST AND DRUGGIST man, who was there, gathered from the remarks that were made that the whole of the expense was defrayed by the firm.

ACTION FOR WRONGFUL DISMISSAL.—At the Leeds County Court, on July 23, Henry Kettlewell, now a stationer of Manchester, sued Taylor's Drug Company for 8*l.* 8*s.* damages, alleged to have been sustained by wrongful dismissal. The case for the plaintiff was that in 1885 he was engaged by the defendants as manager of one of their shops in Leeds. In the course of time his remuneration was increased from 30*s.* to 2*l.* a week. In 1888 he left defendant's employ, receiving on that occasion one month's notice. In December of 1890, however, he was again employed by the defendants in the capacity of superintendent of all the shops in Leeds, for which he received 2*l.* 2*s.* weekly. In February of this year the plaintiff was removed to Hull as superintendent of several new shops the defendants had opened there. He had only been there two weeks when he received a letter from the company saying that, as they did not intend carrying out their project at Hull for the present, they would have to dispense with his services "a week on Saturday, the 28th inst." He left the shop at once, refusing to take the 2*l.* 2*s.* offered him in lieu of notice. The defence set up was that, as the plaintiff was engaged at a weekly salary of 2*l.* 2*s.*, without any conditions added, plaintiff's was a weekly hiring, and he was subject to only one week's notice, or 2*l.* 2*s.* in lieu. The managing director of the company stated that, in 1888, he dismissed the plaintiff for impertinence. His engagement at Hull was only a temporary one. It was the custom for qualified chemists to receive a month's notice, but the plaintiff was only a superintendent, not a chemist, and his duty was to make himself generally useful. Verdict for the plaintiff. [The defendants in the above case, writing to the *Leeds Mercury* of July 25, state that the plaintiff was only engaged by them as a shop-walker in Leeds, and re-engaged as temporary manager of one shop at Hull last year.]

SULPHURIC-ACID POISONING AT A HOSPITAL.—An inquest was held at St. Pancras, on July 27, touching the death of Ellen Gertsch (37), the wife of a Swiss waiter, residing at 5 Silver Street, Soho, who died on Thursday of last week at the Temperance Hospital, Hampstead Road, after taking a quantity of sulphuric acid. The evidence showed that the deceased suffered from alcoholism. On the advice of Dr. Ryan, Gower Street, she was taken to the Temperance Hospital on Sunday by her husband, when she was admitted. On Tuesday evening Mrs. Brown, a patient, cried out that the deceased "had taken something from a bottle," and it was then found that Mrs. Gertsch had, while in bed, stretched out her hand and seized a bottle containing sulphuric acid from among a number of other bottles, also holding poisons, all of which were used for testing purposes. The bottles stood openly upon a table, and could be reached by the patients. The deceased, having possessed herself of the sulphuric-acid bottle, removed the stopper and drank the contents, replacing the stopper and the bottle upon the table before the nurse could get to her. Miss Frost, the nurse, said the bottles were not labelled "Poison," and she had deemed the manner in which they were openly exposed dangerous. When she first went to the hospital she expressed her fears to Mr. Wright, a member of the house committee, and to others, but the bottles remained upon the table as before. The jury returned a verdict of "Suicide while of unsound mind," with the following rider:—"And the jury, having heard in evidence that certain bottles containing poisons are kept on tables in the wards for testing purposes, and that such bottles are not under lock and key, would

recommend the hospital authorities to carefully consider this matter, with a view to placing such bottles in safe custody."

BRITISH PHARMACEUTICAL CONFERENCE.—Mr. William Martindale, F.C.S., president of the conference, visited Cardiff, on Friday last, for the purpose of familiarising himself with the arrangements made by the local executive for the forthcoming meeting. He was entertained at dinner by the executive at the Angel Hotel, and on Saturday was escorted by Mr. J. Munday and Mr. A. Coleman, chairman and secretary of the local committee, to the University College, where he inspected the rooms set apart for the conference. He also visited the town hall and other public buildings. Mr. Martindale expressed himself pleased with the arrangements which had been made for the reception of the members of the conference. He was much struck with the appearance of the town, but expressed his regret that so little real pharmacy appeared to be done by the chemists. In answer to his questions, Mr. Coleman said most of the physicians in Cardiff did their own dispensing, there not being half a dozen who sent out prescriptions. The local circular to members of the conference has been issued. It contains very little that has not already been reported. The reception of the president on Monday, August 17, is to be followed by a *conversazione*, to include vocal and instrumental music, an exhibition of microscopic objects, and light refreshments. The conference on Tuesday will be followed by a steamboat trip to Barry Dock, where tea will be provided, and on the second day by a drive to Caerphilly Castle, where Lord Bute will entertain the members to tea. The excursion to Speech House, in the Forest of Dean, on the Thursday, is to include a visit to the Scowles Iron Mines, formerly worked by the Romans, and a drive to Symond's Yat, on the Wye, with its magnificent double views of the river, ancient caverns, and Roman encampments. Applications for tickets must be made to the hon. local secretary, Mr. A. Coleman, before August 8. No. 1 book of tickets, price 5*s.*, will admit to the luncheons and teas on the meeting days, carriage drives, steamboat excursion, and smoking concert. No. 2 book of tickets, price 10*s.* 6*d.*, will be for the Forest of Dean excursion, and will include railway journey, coach drives, luncheon at Speech House, tea at Symond's Yat, &c. A ticket (also a ticket for lady) for the reception and *conversazione* will be sent to all members who intimate their intention to be present at the conference meeting. The railway facilities are all that can be desired. Holders of tourists' tickets for Porthcawl, Swansea, Tenby, Aberystwyth, Milford, &c., may break the journey at Cardiff for the conference. Members can also obtain, on production of cards of membership, tickets from Cardiff (available for the day of issue or following day), to any place within 50 miles, at a single fare for double journey. On the back of the circular is a plan of central Cardiff, with views of the free library and museum, the towers of Cardiff Castle, entrance to the Docks, and Llandaff Cathedral.

TERrible ACCIDENT AT A GATESHEAD CHEMICAL-WORKS.—An accident, resulting in the death of seven workmen' injuries to two others, and great destruction of property, occurred shortly before seven o'clock on Sunday night, July 26, at the Friars Goose Chemical-works, on the river Tyne, about two miles below Gateshead. The works now belong to the Chemical Syndicate, but were formerly owned by the Jarrow Chemical Company. The present manager of the Friars Goose Works is Mr. G. T. France. At half-past six on Sunday evening it was reported to John M'Connell, a foreman, that the coke-packing at the bottom of one of the condensers was on fire. It is supposed that the fire originated in connection with the stirring up of the furnace fires after the week's work was over. M'Connell states that he and two men, named William Hislop and Joseph Knott, went to the top of the condenser, where the water-tank was, for the purpose of turning on the water to extinguish the fire, and he then went for the hose-pipe. While he was away the condenser collapsed. Knott at this time was upon one of the adjacent condensers, and reached the ground by means of an iron overflow-pipe. The other man, William Hislop, fell the whole distance to the ground, where his feet were held beneath some of the fallen stones. A number of workmen rushed to his rescue, but a foreman, named Herd, realising that there was danger, ordered some of them back, and many lives were probably thus saved. While six

of the men were trying to release Hislop from his painful position three more of the condensers suddenly collapsed, and the six men were buried, along with Hislop, in the ruins. It is supposed that the collapse of the first condenser was due to the steam generated when an attempt was made to extinguish the fire, and that the fall of the other condensers was due to their contiguity to the first one. The decomposing-house, in which the calamity occurred, contains six large furnaces, recently erected. In these furnaces are placed charges of several hundredweights of common salt and sulphuric acid. The resulting hydrochloric acid is conducted in long brick flues, over four feet square, to the bottom of the condensers, which are situated at the south side of the shed, about six yards from the end of the nearest furnace, and which tower eighty feet high from the ground. The condensers, six in number, are composed of stone, strongly bound together with iron girders, the bottom being lined with bricks and packed with coke. The condensers were built some twenty-six years ago, but are often repaired—in fact, one of them had just been undergoing repair. Of the seven entombed men it was soon ascertained that six were dead. The seventh, James M'Cuskin, was alive, though buried beneath a heap of stones, girders, and cross-beams, and huge stones lay across his legs and pinned him to the spot, while he also lay up to the middle part of his body in acid, suffering great pain. The fumes of the acid were overpowering, but relays of rescuers worked in short turns at the task of trying to rescue M'Cuskin, but, although unremitting efforts were made all night to rescue him, and sustain vitality, at eight o'clock on Monday morning, while still imprisoned, he expired. After his death the remaining condensers were blown up with dynamite.

THE CARBOLIC-ACID POISONING CASE AT LANCASTER.—With reference to our report of this case in **THE CHEMIST AND DRUGGIST** of July 13, in which Mr. Coroner Holden, of Lancaster, commented rather strongly on the conduct of Mr. William Wyatt, pharmaceutical chemist, for selling carbolic acid, we take the following letter of Mr. Wyatt to the coroner, and his reply, from the *Lancaster Observer* :—“4 Stonewell, Lancaster, July 18, 1891. L. Holden, Esq., solicitor, Lancaster. Sir,—The current issues of the Lancaster papers contain reports of your summing up to the jury in the inquiry relative to the death of the woman Bannister on Monday last. In these reports it is stated you remarked to the jury, ‘. . . Assuming it to be absolutely true that he did place on the bottle a label similar to the one produced, it did not comply with the Act of Parliament. The label had not got upon it the name and address of the seller.’ May I direct your attention to this inaccurate statement of the law? 31 and 32 Victoria, cap. 121, distinctly states, ‘The several articles named or described in the Schedule A shall be deemed to be poisons within the meaning of this Act.’ . . . Carbolic acid, not being a scheduled poison, and hence not within the meaning of this Act, cannot fall within the conditions imposed by section 17 of the Act above cited. . . . I feel that your inaccurate statement of the law is calculated to do me an immense amount of commercial injury. I have pointed out the legal error into which you have fallen; may I call upon your honour as a gentleman to make a public retraction?—failing which, I shall consider myself justified in stating the legal aspects of the case through the medium of the press, and, in addition, call the attention of the Home Secretary to the whole legal circumstance. . . . I am, sir, yours very respectfully, William Wyatt.” The coroner's reply to the above letter runs as follows:—“Lancaster, July 20, 1891. Sir,—I have your letter. It is a rule of mine not to reply to criticisms on what I do in my official capacity as coroner. I am quite willing to leave anything I may say or do to the public, who, I generally find, express approval of it. If I make an exception in your case, it is because your letter is courteous, and I should regret very much that what I said on taking the inquest on M. A. Bannister was, as you state, ‘calculated to do you an immense amount of commercial injury.’ . . . When I am convinced I have done you any wrong, I will do all I know to remedy it. You must excuse me, however, if I at once say that I cannot take my interpretation of an Act of Parliament from a chemist and druggist—not even from a pharmaceutical chemist. I told the jury distinctly—did I not?—that carbolic acid was not specifically named as a poison in either Schedule A or B to

the Pharmacy Act, 1868, because at that time it was, on your own showing, ‘hardly known.’ It is, however, expressly enacted by that statute that ‘it shall be unlawful to sell any poison, either by wholesale or by retail, unless the box, bottle, vessel, wrapper, or cover in which such poison is contained be distinctly labelled with the name of the article and the word ‘Poison,’ and with the name and address of the seller of the poison’; and then the Act goes on to deal with the poisons named in the two schedules. The Act recites that ‘it is expedient for the safety of the public that persons keeping open shop for the retailing . . . poisons, and persons known as chemists and druggists should possess a competent practical knowledge of their business’; and, crediting you, willingly, with this knowledge, I certainly hold that it was not ‘for the safety of the public’ that you should loosely have sold to a woman, not sober, poison, in a dirty beer-bottle, sufficient in quantity to kill a dozen people, and which did kill the woman. It was, in fact, in the interest of the public I made the remarks I did in summing up the evidence, and to those remarks I adhere. I am, sir, your obedient servant, Lawc. Holden. Mr. W. Wyatt, Stonewell.”

IRISH NEWS.

THE SALT INDUSTRY.—A bed of salt has been found in Carrickfergus. Already 40 feet of the vein has been cut through, and it is believed that the supply of rock-salt is inexhaustible.

WHAT FOR?—The Local Government Board have written to the guardians of the Dungarvan Union asking to be supplied with Sir Charles Cameron's analysis of the drugs and medicines supplied to the Union.

COST OF MEDICINES.—At a recent meeting of the Belfast Board of Guardians attention was called to the difference existing between the cost of medicines supplied to the Barrack Street dispensary, 50*l.* 3*s.* 9*d.*, and that of the Great George's Street, 104*l.* 5*s.* 9*d.* The latter was double the former, and yet the districts were very much alike. The clerk said that the requisition for drugs always came before the Dispensary Committee, and was approved of by them. The committee, in fact, ordered the supplies themselves. After some discussion, it was resolved to request the Dispensary Committee to explain the matter.

A GIRL CHARGED WITH CORROSIVE-SULPHATE POISONING.—At the Wicklow Assizes, on July 22, Julia Murphy, a little girl, aged 13, was indicted for having on February 20 attempted to administer a quantity of corrosive sublimate to Henry Jackson, a visitor at the house of Thomas Driver, of Coolboy, where she was employed as a servant. Thomas Driver said Mr. Jackson left his house on the day mentioned about half-past two. At three o'clock witness was getting his tea, and noticed that it was black and discoloured the spoon. He tasted the tea and found it bitter, and it burned his mouth. At the time he had some corrosive sublimate on a shelf in the kitchen, and sometimes carried some of it in his pocket, as he used it for cleaning sheep. About a month after he accused the prisoner, and she admitted having put the poison in the tea. Constable Cunningham, who arrested the prisoner, said she made a statement to him to the effect that she put the poison in the kettle for the purpose of poisoning Henry Jackson, and she added, after a pause, that she put it in order to poison all the family, and that she knew it was poison. Mr. R. J. Moss, chemical analyst to the Royal Dublin Society, stated that corrosive sublimate was a very powerful poison. If any of it were put in water from which tea was made it would discolour the tea and the spoon, and would produce a very disagreeable taste. Three grains was considered a fatal dose. It was nearly as powerful as arsenic. After nearly an hour's deliberation the jury returned a verdict of not guilty; but the prisoner was put back, as counsel for the Crown intimated that the accused would be indicted for having attempted to endanger life.

THE SUPPLY OF DRUGS.—At the fiscal proceedings of the Wexford grand jury, held last week, a discussion arose on the expediency of supplying medicines and drugs to the county prisons under existing arrangements, by which the supply was obtained from one of the local druggists as neces-

sity arose, or to purchase the drugs at first cost from the Apothecaries' Hall in Duhlin, paying an annual salary to the apothecary for compounding them. Mr. John Howlin read a letter from Dr. Nunn, apothecary to the infirmary, who volunteered to compound or supply the medicines to the prison at a much more economical rate than now paid by the county. Mr. Howlin quoted some items from the present contractor's (Mr. Ricards) accounts to show that a change might be made with advantage; but Mr. Walker defended Mr. Ricards, saying that he recollects an allegation of extravagant charges had some time before been made against Mr. Ricards by Dr. Boxwell, then medical inspector of the prison, and to investigate which the Board held a special meeting, when Dr. Boxwell explained to the speaker and to others present that he did not mean to convey that Mr. Ricards' charges were exorbitant; that, on the contrary, they were on a par with those laid down and charged by the Apothecaries' Hall, but that more economical arrangements for the supply of drugs might be made for the county. He submitted that the contractor's charges were strictly fair and legal. He would ask the grand jury to consider the justice and prudence of dispensing with the services of an old and trustworthy officer, who for so many years had acted as their servant without the least accusation ever having been cast on him. Mr. Braddell said that, as there was a profit of 200 per cent. on the medicines, the better plan would be for the board to adopt the same practice as was carried out at the dispensaries. Mr. Howlin disclaimed any intention of throwing a slur on the apothecary, but mentioned that for the previous seven years they had paid 475*l.* for medicines; and the account now before them came to 18*l.*, although it only spread over a period of three months. After an hour's discussion, it was resolved to give 20*l.* a year to the apothecary, and that Mr. Ricards would continue in that position.

CHARGE OF ARSON AGAINST AN APOTHECARY.—At the Custody Court, Belfast, on July 23, before Mr. MacCarthy, R.M., W. C. Morgan, proprietor of the Medical Hall, Albertbridge Road, Ballymacarrett, formerly occupied by the late Dr. McMeekin, was charged in custody with having "wilfully and maliciously set fire to his premises with intent to defraud the West of England Fire Insurance Company and other companies." The constable who discovered the fire on the previous night stated that, on going into the pharmacy, he saw flames coming from behind the counter near the window. He examined the place, and saw a gas-pipe standing straight up, and flames arising from it. He also observed that the cross counter, six yards from the window, was on fire. A few feet further on he saw the front and bottom of a drawer, as well as a desk or table, which had apparently been used for compounding medicines, also on fire. He then heard the people outside shouting that a fire had broken out on the top story. He went upstairs, and was there joined by Sergeant McKeown. They went into a back bedroom, and found a feather bed smoking, water having been thrown on it. One of the pillows was burned, together with a portion of the blankets. In the drawing-room he saw a number of vases containing some fancy grass which had also been on fire, but had been extinguished. He then went below, where a man was throwing more water on another fire, which was about midway between the other two in the shop. He examined the spot, but could not find out what had caused the fire. He saw five fires in all. After he rushed in at first he saw the prisoner as if he was crossing from the yard. Witness asked him if it was his shop, but got no reply. He did not again see him until after his arrest by Sergeant McKeown. In reply to the solicitor for the accused, the witness said that when he first saw the prisoner the latter was coming from the back entrance. He was not informed that Morgan was getting assistance when he became aware of the fire. He could see no apparent cause of the fires in the shop at the time. Sergeant James McKeown corroborated generally. He arrested Mr. Morgan on a charge of wilfully and maliciously burning his house, and cautioned him. The prisoner replied, "If that is the case I am ruined." The accused did not seem to be excited, but appeared as cool as the witness was himself at present. The prosecutors applied to have the accused remanded for eight days to enable the police to inquire further into the matter. The Court concurred, but refused to accept bail for the prisoner, who was thereupon removed in custody.

SCOTCH NEWS.

DUNDEE CHEMISTS' HALF HOLIDAY.—Last week's excursion of the Chemists' Assistants' Association was to the Dundee Gas-works. The visitors were met by Mr. Honeyman, who conducted them over the works, and, through the courtesy of the gas-analyst, Mr. Samuel Donald, permission was also obtained to visit the laboratory. Here a complete plant, on a small scale, is employed to estimate the relative qualities of different kinds of coal used. The use of the photometer was also demonstrated.

THE MEDICAL CURRICULUM.—At the Glasgow medical graduation ceremony on Thursday, the closing address was delivered by Dr. Fergusson, professor of chemistry, who said that a five years' medical curriculum was being spoken about. In view of the advances made in medical science within the past thirty years, this extension of the curriculum might be an improvement, provided the additional year were added at the end of the course, and the age for taking the degree raised to 22. He maintained that the medical man should be thoroughly proficient in the scientific investigations allied to his profession. Chemistry, physics, anatomy, and other branches of science were fundamental to medicine itself, because medicine was purely a physical science. Three years, he held, was short enough for the medical scientific training, and he suggested that the proposed extra year should be devoted to science.

Foreign and Colonial News.

A SIAMESE UNIVERSITY.—Siam, following the example of Japan, is commencing to Europeanise her institutions. The founding of a university has been decided upon, and Professor Haase, of Königsberg (Germany), has accepted the appointment to the chair of physics.

NATIVE SOAP-FACTORY IN POONA.—Rao Bahadur Hari Raojee, a local millionaire, has started a soap-factory at Poona. He proposes to cater specially for native custom; hence he has to guarantee that the soap contains no animal matter, which would be a fatal obstacle to its employment by orthodox natives.

THE SALE OF POISONS IN INDIA.—The facility with which poisons can be procured in the bazaars in India has been a frequent topic of discussion in the Indian press, but no steps have yet been taken with a view of placing a restriction on the sale. The official chemical examiner, in his report lately submitted to the Indian Government, drew attention to the ease with which white arsenic can be procured in any bazaar, and at any rate suggested that a partial restriction, to the extent of limiting the power of selling to certain classes of shops, and requiring the vendor to keep a simple register of sales of arsenic and mercurial compounds only at first, might be put in force, so as to help the magistracy to trace these poisons to the possession of an accused with greater certainty than at present. Possibly some steps may now be taken in the matter, says the *Madras Times*, as the suggestions of the chemical examiner have been referred for remarks to all district magistrates, the Inspector-General of Police, and the Commissioner of Police.

NATIVE DISPENSARIES IN INDIA.—A native medical practitioner of Bomhay, who had held his diploma for three years, but could get no practice and was destitute of funds, committed suicide the other day through despair. This melancholy occurrence furnishes the *Times of India* with a text for an editorial article on the subject of the miserable status of native doctors and dispensers generally, in the course of which it remarks: "When the practitioner is first set floating on his own wings, dispensing, indeed, seems his only resource; and the result we see in the numberless nameboards of medical men, and the rows of medicine-bottles that meet the eye in every thoroughfare, and even slum, of Bomhay. A prominent corner shop, with an almirah stocked with medicine-bottles, a stethoscope, and an office desk—all crowned with the cahalistic formula, 'L. M. & S.'—have no longer the sorcery of twenty or thirty

years ago. The barrier between chemists and doctors had, in India, become one of the flimsiest texture, and under cover of advice one usurps the other's functions. This transcendent blot goes on, getting worse from year to year; and, unless some stand is made, the position of the medical practitioner of the future will be undistinguishable from that of his neighbour across the way, who dispenses to his customers *ghee* or *gingham*. The day is fast approaching when a Hospital Commission, having incidental issues bearing on the relations of hospital to private practitioners, will have to be assembled in India, on the lines of that which has been for a considerable time taking evidence in London."

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

A CURIOUS LEGACY.—A Lyons medical journal announces a curious legacy that has been left by a very wealthy old lady, recently deceased, in that city, at the age of 93. The clause in question of her will reads as follows:—"Out of gratitude for his enlightened and devoted services, to which I owe my longevity, I bequeath to Dr. X. everything that is contained in my small cabinet." The piece of furniture in question contained, intact and still bearing their seals, all the medicine, pills, &c., prescribed to the defunct by her medical adviser during a period covering more than the past ten years.

HONOURS FOR FRENCH PHARMACISTS.—Long lists have just been printed of the names of gentlemen who have received the distinction of being decorated with the order of "Agricultural Merit," and of receiving the "academical palm." There is a fair sprinkling of the names of pharmacists and chemists on the lists. But the reason for the awards is not very distinctly defined. However, amongst those who have been honoured may be mentioned M. Delachanal, head of the Chemical Laboratory of the Ecole Centrale, and Messrs. Ferré and Fallot, professors, respectively, at the Schools of Pharmacy of Bordeaux and Toulouse. These gentlemen are named "Officiers d'Académie." Amongst the new "Chevaliers du Mérite Agricole" figure a good many provincial pharmacists, who have doubtless rendered good service to agriculture in their respective districts.

THE OXIDATION OF DRYING-OILS.—At last Tuesday's meeting of the Academy of Sciences M. Moisson read an abstract of a note by M. Livache on his researches concerning the solid matter formed by the oxidation of drying-oils. He showed the analogy existing, from the physical point of view, between indiarubber and that substance, which, when ground with oil of turpentine, benzine, &c., expands and granulates. On the one hand, it takes the form of very fine fragments, completely insoluble; and, on the other, a soluble body forming a kind of cement to the fragments. As a result, it is possible to make a paste of oxidised oil, which, after the evaporation of the liquid employed, will leave a completely dry product. The necessity of superposing thin layers, as in oil-paintings, is thus avoided. Or, if the layer is too thick, a film forms on the surface, protecting the oil underneath against oxidation and preventing its being transformed and becoming fixed.

SALTS OF STRONTIUM AND FABRICATED BORDEAUX WINES.—M. Laborde drew the attention of the Academy of Medicine, at its last meeting, to the properties of strontium, which up to the present time has wrongly been considered as poisonous by chemists. He declared to have absorbed a certain quantity without ill-effect. M. Gautier remarked that certain professors of a provincial faculty were directing a movement for plastering wines by the aid of sulphate of strontium, the dishonest object in view being to manufacture imitation Bordeaux wines with the product of the wine obtained from the south of France. He stated that commercial salts of strontium, far from being pure, like that which M. Laborde had swallowed without danger, always contained a proportion of barium compounds. This allows of the introduction in wine of chloride of barium, a poison the effects of which may be compared to those produced by St. Ignatius bean. M. Laborde replied that he had only examined the question from the therapeutic point of view,

and had sought to prove that chemically-pure strontium is not poisonous.

THE SUPERIOR COUNCIL OF PUBLIC INSTRUCTION held its second meeting on Monday morning last. Amongst the business transacted it was decided that (1) students attending the schools of medicine and pharmacy who had failed to pass the August and November examinations may again present themselves at a special examination to be held at the various faculties during the first week of January following; (2) the title of honorary professor conferred on retired professors of any faculty, by application of article 41 of the decree of December 28, 1835, may be withdrawn by the Minister of Public Instruction; due advice, however, must be given to the interested party, who will have an opportunity of being heard; (3) the following resolution concerning the medical circumscriptions of Bordeaux and Toulouse:—Dating from November 1, 1891, the mixed faculties of medicine and pharmacy of Bordeaux and Toulouse and the Preparatory School of Medicine and Pharmacy of Limoges will deliver certificates of aptitude corresponding to the diplomas necessary for following the professions of officers of health, pharmacists of the second class, herbalists of the second class, &c., in the various departments over which they have control.

ATTEMPTED POISONING BY A WIFE.—In a case which is being investigated by the Paris police, a painter and decorator, M. Rondy, aged 38, was taken seriously ill in March last, and his own doctor's treatment proving ineffectual, he went to the Hôtel Dieu. There his symptoms were declared to be those of poisoning. He remained at the hospital until the beginning of July, when he left completely recovered, and went home to live with his wife. She was a young woman of 23, apparently very fond of her husband. After a few days the old poisoning symptoms reappeared, and, on the advice of a friend, he determined to watch his wife and an intimate friend named Oncler, who visited him frequently. The other evening, having risen from his dinner-table for a few minutes, he noticed, on sitting down again, that a white powder had been thrown into his plate. After dinner Oncler, as usual, left the house, and M. Rondy accused his wife, and wrung from her a confession of guilt. He then went to the police-office, and the same evening Madame Rondy and Oncler were arrested. The woman was recently examined, when she confessed to the crime. She and Oncler, she said, tried at first to poison her husband with sulphate of copper, but, finding it was too slow of effect, they used white-lead instead. The police have found packages of these two drugs at Oncler's house.

THE TUBERCULOSIS CONGRESS.—On Tuesday the second meeting of this body was commenced in the amphitheatre of the Faculty of Medicine. The meeting was well attended, and the subjects for discussion were (1) the identity of tuberculosis in men and in cattle and other animals, (2) the formation of bacteriological societies, (3) agents capable of destroying the Koch bacillus without injury to the organism from the point of view of the therapeutics of human and animal tuberculosis. Professor Graener gave an account of experiments made by M. H. Martin and himself on anti-tuberculous vaccination. They used rabbits in their experiments, and have so far succeeded as to be able to demonstrate the vaccinal action of the tuberculous virus; but further than this they have not been able to prove. Professor Arlaing, of Lyons, delivered an address on his experiments with Koch's tuberculin, in which his conclusions as to the value of the discovery and the method were very pessimistic. A tuberculous cow, which had still at least a year's life before it, succumbed in four days to an injection of 10 milligrammes of tuberculin, and Professor Arlaing concluded with the remark that "the experiments pursued at the laboratory of experimental medicine at Lyons had not exhibited Dr. Koch's tuberculin in an advantageous light." Afterwards the meeting discussed the tuberculosis of birds, and visited various laboratories and hospitals.

VOLATILE COMPOUND OF IRON.—Mr. Ludwig Mond has succeeded in making a compound of iron and carbonic oxide similar to the deadly nickel compound which he prepared some time ago. It has only been obtained in a highly dilute condition, but its properties have been sufficiently studied to indicate that it is $\text{Fe}(\text{CO})_4$.

BRITISH MEDICAL ASSOCIATION.

"THE advent of the annual congress of the British Medical Association for 1891 adds one more link to the bonds which unite medicine, surgery, and pharmacy; furnishing, as it does, evidence that the science and art of the physician is intimately blended with, and dependent upon, the skill of the pharmacist." That is how the Liquor Carnis Company put it. It was the fifty-ninth annual meeting of the association that was held at Bournemouth this week, but, so far as pharmacy is concerned, there are only four-and-twenty links in the chain; for thirty-five years had the association met before it struck someone to have an "annual museum" which, being interpreted, is "exhibition of foods, drugs, surgical instruments, &c." It was then that the pharmacist stepped in, and, with gradually increasing enterprise on the part of exhibiting houses, the museums have developed into a regular feature of the meetings. In many respects this week's exhibition has surpassed its predecessors. In the first place, the environment was good, the tennis-court of Hôtel Mont Doré being a well lighted hall close to where the various sections of the association were meeting, and with the pleasant winter gardens of the hotel on one side of it. Then the local secretaries were energetic men, especially Mr. Mahomed and Dr. Macgillycuddy, both of whom exerted themselves greatly on behalf of the exhibitors. It was a happy idea of the local committee to arrange for

A RECEPTION

on Monday evening. By that time many of the hundreds of members who had promised to attend the meeting had arrived, and at 8 o'clock they were invited to gather in the tennis-court. When our reporter got there, in the afternoon, things looked far from hopeful. Everywhere were packing-cases and heaps of straw; everybody was busy fixing up exhibits; but in a few hours all was shaken into order, and when the guests began to arrive at 8 o'clock, they found all the tables to the right-hand of the entrance devoted to foods and drugs, and the majority of those on the left to surgical instruments. There also were pathological specimens and a series of the most comical drawings made by a lunatic, with specimens of his letters. There was, further, an interesting collection of microscopical specimens, under the care of Dr. Schofield, assisted by Mr. Kanthack. Under the balcony was a unique collection of medical curios, maps, engravings, and portraits; and in the balcony a small collection illustrative of some points in the physiography of the district, including the musical sand, fossils, maps of the sand-bar at Christchurch Harbour at different dates, the Isle of Purbeck, and Poole Harbour. Mr. Duncan Hume (organ) and the Royal Italian Band performed a selection of music from 8 till 11, when most of the guests had left.

THE DRUG, &c., EXHIBITS.

With the exception of sanitary appliances, which were shown in St. Peter's Schoolroom, the whole of the exhibits were arranged in the tennis-court. The stands were arranged round the walls of the building, upon the organ gallery, and there were three rows of tables down the centre. As systematic classification is scarcely practicable, we shall take them as we approach them from the entrance—it thus happening that we come first to an exhibit by a local man, Mr. S. HARDWICK, pharmaceutical chemist, which was a neatly arranged display of tablet-triturate, capsules, and pastilles of his own manufacture, together with an antiseptic inhaler and several emergency cases fitted with the triturates. Next to this was an artistic display by THE J. P. BUSH MANUFACTURING COMPANY (32 Snow Hill, E.C.) of their raw-food extract—"Bovinine." The way in which this was shown was decidedly sumptuous, the whole of the location being draped with art muslins in good style, and the pyramids of "Bovinine" were relieved by strings of trailing vine. In conversation with our reporter, the company's representative said they have every reason to be satisfied with the progress they have made since they introduced "Bovinite" here a year ago.

CORBYN, STACEY & CO., of High Holborn, occupied all

the rest of the space at this end of the hall. Liebreich's "Pepsin-Essenz" was one of the articles to which prominence was given, also bromo-caffeine, chaulmagra oil and its preparations, and their well-known calamine; but a very complete line of pharmaceutical preparations with which their name is directly associated was the chief feature of the exhibit. For instance, there was a nice assortment of elixirs, which seem now to have fairly got a start in this country; but it is noticeable that it is the newer remedies, rather than old favourites, which are served up in this form. We refer particularly to cascara sagrada, chloralamide, exalgine, orexin, and the like. Crude drugs were not wanting in this exhibit: for example, there were all the recent synthetic remedies, and the three species of strophanthus which commonly appear on the market. We may here recall the fact that the official seed *S. Kombe* is the only one which is downy, both *S. hispidus* and *S. glabrus* being brown and free from silky hairs, so that pharmacists need have little difficulty in distinguishing the genuine from false seeds. Amongst other preparations exhibited by Corbyn, Stacey & Co., we ought to mention their champagne coca, which, we are informed, is bottled by a noted maker of champagne, to whom the firm supply a colourless extract of coca, and he does the rest. Their ordinary coca wine is, of course, made direct from the leaf. Our attention was also called to a cascara wine, which is quite palatable—is, in fact, used at dinner in strict moderation. The exhibit also included a number of malt combinations. A new candidate for the patronage of babydom appeared in the shape of Horlick's malted milk (MALTED MILK COMPANY, 39 Snow Hill, E.C.). This is a mixture of powdered milk solids with a digested extract of malted grain (also dried and powdered). The preparation, we find, dissolves readily in water, to form a milky fluid, with a diastase odour.

Beside the last exhibit was a neatly arranged display of the manufactures of SEABURY & JOHNSON (London, 46 Jewin Street, and New York). The portrait which we gave of "George J." last week did not flatter him. Mr. A. H. Mason, the firm's European manager, had a nice platinotype one of him, draped with the Union Jack and Stars and Stripes, as the centrepiece of the exhibit. It was quite an attractive feature amidst the plethora of antiseptic dressings, plasters, bandages, poultices, and what not, that made up the exhibit. There is no question of the fact that antiseptic surgery is a real thing and progressive. Here were all the indications of it, in ligature, suture, gauze, cotton—everything aseptic in themselves, or charged with bodies of known germicidal value. A nice dressing our reporter picked up, which was shaped like a pair of spectacles. "What's this?"

"Oh, that is an eye-pad, made of antiseptic wadding, as Professor Horner, of Zurich, suggested. Good in ophthalmia, and other eye-diseases. But have you seen this B.W.B. elastic-woven bandage?"

"Yes; looks like soft Turkish towel-stuff."

"Not unlike; but see how elastic it is"—an inch seemed to become a foot at a stretch. "Then you will note that the peculiarity of the web is that no matter where you wind the bandage, up or down, it grips. That's why Dr. McNaughton Jones uses it in diseases of the mammae."

This is a bit of the conversation which took in plaster of Paris bandages (in tin ready for the water), sulphur candles, hydronaphthol and its preparations, belladonna plaster (brown and green), and other things which were there to tempt "progressive practitioners." Mr. Mason had alongside this exhibit some of the manufactures of the Warrington Chemical Company.

CHLOROFORM

was one of the leading subjects of the meeting this week. Appropriately, therefore, the manufacturers of what is now known in Europe and the English colonies as "Warrington chloroform" made a good display of their product, and, as this was the first time they have exhibited at the annual museum, medical men appeared to be much interested in the article. We have nothing to add to what we said of this chloroform in September last, and have had no occasion to alter the favourable opinion which we then expressed regarding it. Along with chloroform the company exhibited beautifully white carbolic acid (absolute), in detached crystals and in mass.

G. & G. STERN (Gray's Inn Road, E.C.) succeeded, in spite of their recent fire, in making an exhibit of their goods which was quite equal to last year's; but the principal partner informed our representative that they continue to discover damages which were at first unknown, and, although they have kept pace with orders, this has only been by great exertion. This is the off-season for the "Pumiline" products, but there was such a show of their various specialities from the *Pinus Pumilio* at this end of the ball that it may be said this part of Bournemouth was more highly charged with pine odour than its own famous pines have ever made it. We note that the firm have considerably improved pumiline ointment, which is a combination of zinc oleate with pumiline in a lanoline basis. It is now perfectly white and delightfully smooth. The pumiline emulsion is also now largely used for inhalations; it is made in various strengths, but the 1 in 40 is a milky solution which mixes with water without separation. Previously we have reported on the pumiline soap as super-fatted and non-irritating, and we may now observe that the odour of the soap is more rounded off by a judicious blend of perfumes than before. A very good display was made of "Pepsalia." This also has been improved, as it contains the more active alimentary digestive ferments, which are combined with a trace of hydrochloric acid, along with the salt. It is perfectly dry and white, and is practically odourless. In addition to a liberal distribution of physicians' samples, Messrs. Stern exhibited the action of pepsalia upon coagulated albumen, beakers containing like quantities of albumen, with an acid solution alone and with water alone, being placed to show how more quickly pepsalia digests the albumen.

CADBURY BROTHERS (Birmingham) were placed between the two exhibits last mentioned. Their exhibit consisted of cocoa and various combinations of chocolate, cocoa biscuits being one of their most recent additions. There were several excellent specimens of the fruit of *Theobroma cacao* on the table, and it was amusing to hear some of the lady visitors at the *conversazione* speculating as to the origin of the fruit. Some were certain that it was a sort of baby cocoanut, but on this point Messrs. Cadbury's representative was able to undeceive them by cutting open the fruit and showing the seeds within. This firm make a strong point of the fact that their cocoa powder is simply the crushed bean freed from fat, sent out without any addition, and certainly with no added alkali whatever.

THE SANITARY WOOD WOOL COMPANY (LIMITED) (26 Thavies Inn, Holborn Circus) showed all the preparations regarding which they circularised the trade last week. They tell us that the annual consumption of the wadding in hospitals is 140,000 lbs. The wadding is self-absorbent, being free from oil, and sinks in water quite readily. At the Museum they were bringing under the attention of visitors their "Lotiforms," which are little pads of the wool dyed pink, and covered with muslin. The wool is highly impregnated with mercuric chloride, and one of the pads shaken up with a prescribed quantity of water provides in a few seconds a solution of the antiseptic, which is slightly coloured, and of exact strength. We also noticed the sanitary wood wool vaccination-pads, which are made of wood wool tissue, and, while thoroughly protective, form a good absorbent. These are antiseptic.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED) (43 Cannon Street, E.C.). The history and uses of "Creolin" and Jeyes' fluid we do not require to write. The company have done that in a neat little pamphlet, which was freely distributed at the Museum, and which contains formulae for and testimony regarding the use of creolin derived solely from English surgeons and English medical journals. The company had very little new to show, but of their established articles they had a large and prominent display, and were giving away samples of their gauze, which is soft, and of a uniform creamy colour. "There is no marbling about this gauze," said their representative to ours; "some iodiform gauzes that you see have a dark yellow colour here and a light yellow colour there, but this is equally charged throughout with our antiseptic creolin, and we have quite recently executed a Government order for 5,000 lbs. of it." The company are also pushing various toilet preparations of creolin, and have just brought out a nice transparent soap-tablet, which they entitle "transparent complexion

soap." This is a dark-brown tablet, of agreeable colour, which does not produce any irritation of the skin or eyes when used. Creolin is, of course, the therapeutic representative of the active disinfectants which this company have popularised.

BURROUGHS, WELLCOME & CO occupied the space from the Winter Garden door half-way up to the organ-gallery, and here a staff of experienced travellers, under Mr. Burroughs, attended to callers. "Now, here is a real good thing, which I will show you," said the chief—"the new throat tabloids, which you have only to drop into water and they dissolve themselves. You see, I put this one (it contains five grains each of borax and bicarbonate of soda, and half-a-grain of caustic acid) into a little water—there is a slight bubbling, the tabloid becomes spongy, falls to powder, and there, in a minute or so, you have an alkaline solution. Sir Morell Mackenzie likes this idea; a very weak alkali seems to be good for the throat in some cases. There is another—equal parts of salt and bicarbonate of soda in one tabloid. That also disintegrates in the same way. But have you seen our new portable chloride of ammonia inhaler?" "No." Then Mr. Burroughs produced a comfortable-looking earthen-pipe, with bent stem. Into the top of the bowl a biparted bowl is put; one half takes a piece of sponge for ammonia, the other half a piece of pumice for hydrochloric acid, and, with these inserted, one has only to smoke in the usual fashion in order to get dense clouds of the freshly-formed chloride into the air-passages. This inhaler is boxed along with two wide-mouthed bottles, into which the sponge and pumice can be dipped. Sir Morell Mackenzie's hot-air inhaler was also exhibited. This is an elegant nickel-plated affair, which is difficult to explain without illustrations; substantially, however, it is a water or oil bath, either of these fluids or glycerine being used for heating the air-chamber. A spirit-lamp is employed in the first instance. Within the air-chamber a thermometer is dropped, so that the temperature may be regulated by lowering or raising the spirit flame. If the hot air is to be medicated, the substance to be used is dropped on a sponge which is inserted at the end of the inhaler-tube. After that inhalations proceed *secundum artem*. In some throat affections steam is disadvantageous; that is why B. W. & Co. have taken up this new idea of Sir Morell Mackenzie. The inhaler is handsomely finished in nickel. There were other arrangements for the throat, the naso-pharynx and post-nasal or supra-laryngeal atomisers. These are used for the so-called ointment-sprays. The supra-laryngeal has a long double tube nozzle, one of the tubes revolving round the other, and so enabling the spray to be directed up, down, or sideways. An ingenious thing it is. These ointment-sprays are really sprays of white hydro-carbon oil—"Paroleine" B. W. & Co. call theirs. It is a heavy petroleum oil, free from colour, odour, and taste. It is an admirable solvent for many medicaments which hitherto have been used in emulsion form. Menthol, for example, is in this way used for post-nasal catarrh. Our representative had his attention successively called to "Kepler" malt preparations, lanoline and its preparations (by the way, hazeline cream, the mixture of hazeline and lanoline is now being used largely), ichthylol and tabloids innumerable. "There's a very useful monograph on ichthylol and resorcin by Dr. Unna, which we can give chemists a copy of," said Mr. Burroughs, dropping into conversation again, "and anyone who wants a nice pocket pen and pencil case, with paper-knife combined, should write to us for one of these. We'll give them a photograph of Bournemouth too." Both are worth writing for. After this Mr. Burroughs began to tell our representative how much better it is for chemists to sell shilling boxes of artificial ear-drums than pennyworths of cotton wool. It seems that cyclists are taking to the drums; they protect the ears as well from the wind, and are less unsightly than the cotton.

ORGAN-GALLERY EXHIBITS.

In going round the wall-tables from door to door we have passed several exhibits which were placed in the organ-gallery. These were as follows:—

AYLESBURY DAIRY COMPANY (LIMITED) (31 St. Petersburg Place, Bayswater, W.). A selection of the company's milk specialities, including "humanised milk," a combination of sterilised milk with other ingredients, adapting the fluid to

the feeble absorptive power of infants (the Duchess of Fife uses it for her baby); koumiss; and "Sparkling Bland," which apparently is a sort of whey fermented on the koumiss principle, sparkling, and flavoured nicely with orange and the like.

CARSWELL & Co. (Piccadilly) showed, through a local agent, champagne in syphons, the tops of which are silver-plated and then gilt. The wine in this form is specially intended for invalids, and chemists who have wine-licences are potential suppliers of it to the public.

F. E. BILSON, a local chemist, had a very tasteful exhibit of glycogelatine and granular effervescing preparations. His pastilles were admirable in shape and finish. Mr. Bilson also showed an antiseptic vaporiser for use with a night-light.

IDRIS & Co. (Kentish Town). A large space of the gallery was occupied by an aerated-water exhibit from this firm. All their manufactures were represented, including the new "Mammoth Water," which contains a fixed percentage of calcium phosphate, held in solution by carbonic-acid gas, and is intended for rickety children, or others who grow too slowly. The idea is a good one, and many professional visitors expressed themselves delighted with the "Mammoth." Idris & Co. also exhibited lime and lemon juices, and their cordials, fruit-syrups, and "Viking" meat-extracts, as well as Tompsett's cascara pastilles.

JAMES ROBERTSON & Co. (Edinburgh). This exhibit consisted chiefly of flexible gelatine capsules. There was no other in the same line equal to it in the museum, and Mr. Thompson, the head of the firm, told our representative that he now has twenty females working in this department alone. Blaud's pill in capsules, with oleaginous basis, is the leading line, but many dozens of compounds were shown. Antiseptic vaselines were also a feature of the exhibit. These are combinations of definite strength, put up in wide collapsible tubes, for use in midwifery and surgery. Besides these things, Mr. Thompson also exhibited pharmaceutical preparations which are associated with the name of his firm.

PARKE, DAVIS & Co. (Holborn Viaduct, E.C.) had an imposing show-case at the corner of the gallery. Part of the decoration of the case consisted of tubes of gelatine-coated pills of different colours, these pills being oval and without pin-hole. In vases liquid extracts were shown, and in some were fine specimens of raw drugs, such as cascara sagrada. One vase was full of exceptionally large scales of pepsin, while solid and powdered extracts and empty gelatine capsules made up the rest. Below the gallery the firm had another space, for distributing specimens of their pharmaceutical preparations.

Dowden & Co. (Limited), of Bournemouth, exhibited aerated waters and kola champagne.

BOVRIL (LIMITED) (Farringdon Street, E.C.) had their exhibit here also. The company have lately developed the business in new lines, and are now placing on the market a Bovril-cocoa, which, as the names implies, is a combination that provides a nourishing beverage, in which the stimulating effect of theobromine is combined with the sustaining power of beef.

JOHANNIS SPRINGS (Limited) (32A Wharf Road, N.). This company afforded medical men an opportunity of tasting their effervescing table-water. As our readers are aware, it is a natural water containing free carbonic acid gas, and recharged at the springs with the natural gas collected thereat. It is put up in seltzer bottles, as well as long shoulderless half-pints. The water goes well with wines, spirits, and the like, and to its mineral constituents its corrective properties are due.

Henry Bowring (Weymouth) exhibited "Ozonine," a champagne-like aerated beverage and tonic, as well as other aerated waters.

TABLE EXHIBITS.

The first exhibit on the first table was that of the LIQUOR CARNIS COMPANY (Limited) (50 Holborn Viaduct, E.C.). The arrangement was decidedly novel, having been designed and executed by Liberty & Co., the noted art-furnishers. The table space allotted to the company was converted into a bay, which, at the back and sides, was draped with a neutral fabric of quiet tone. In the centre hung a shield inscribed "By Royal letters patent." The top of the table was covered with straw matting; a trim plain wood writing-desk was placed at one side, and in the centre were three

giant models of "liquor carnis" bottles and jars, and a selection of the company's preparations were neatly arranged round them. The front of the stand was prettily carpeted, and there were also delicate chairs, which were not altogether for show. The effect of the exhibit was very striking, yet quiet, and that, Mr. Shepperson explained, was the object he aimed at, or, rather, "no teasing" of the medical visitors. They were well apprised by advertising copies of "Bournemouth as it is," that "liquor carnis" was there, and all that they had to do in order to get specimens was to write their names in the visitors' book. One new preparation was shown—Caffyn's carnis suppositories. The company have had considerable difficulty in getting the liquor in this form without coagulating its albumenoids, but they have succeeded, and the specimens were shown, each one being tied up in a delicate silk gauze.

J. TUCKER & Co. (51 Paddington Street, W.) had an exhibit devoted to eucalyptus products mainly. In this there was an excellent specimen of the scimitar-shaped leaf of *Eucalyptus Globulus*; the oil from this species, and all the firm's preparations of it, which have recently been the subject of controversy in regard to the treatment of scarlet fever, were, however, the leading feature.

HENRI NESTLÉ (9 Snow Hill, E.C.) had an attractive display of his infants' milk food, and there was to be seen occasionally in the corridors of the hotel an enormous child of 2½ years who has been fed on this food. His mother was so proud of him, and visitors were so surprised at his size, that the boy put the exhibit quite in the shade.

J. F. MACFARLAN & Co. (Edinburgh and London) had a small but wonderfully tasteful exhibit of their chemical manufactures, such as chloroform, anaesthetic ether, and chrysophanic acid; but the greater part of it comprised antiseptic dressings of all kinds, and as they were the advisers and makers for Sir Joseph Lister when he first began the antiseptic treatment in Edinburgh, they were able to arrange an interesting series of specimens.

G. MELLIN (Marlborough Works, Peckham, S.E.), although placing his infants' food and other dietetic preparations to the front, on this occasion gave special prominence to a new cod-liver oil emulsion which he is bringing out. It is, we are told, to be pushed vigorously, so we may note that it is a thickish milk-white emulsion made with acacia and sugar, and combined with hypophosphites. The flavour of cinnamon predominates to the exclusion of the taste of the cod-liver oil, which constitutes 50 per cent. of the emulsion. It stands dilution with several times its volume of water without perceptible separation at the end of an hour. Cards of suggested formulae (combinations of the emulsion with wines, tinctures, &c.) were distributed.

CARNRICK & Co. (Limited) and the MALTINE MANUFACTURING COMPANY (Limited) (Hart Street, Bloomsbury) exhibited conjointly. In addition to the peptonoids of the former and the maltine preparations of the latter, Carwick's soluble food for infants was shown. This is a combination of peptonised milk with dextrose and lactose in powder form.

Packham & Co. (Croydon) exhibited aerated waters, chiefly B.P., and their seltzer waters; beside them the New York Pharmaceutical Company (47 Farringdon Street, E.C.) displayed Haydn's Viburnum compound, a speciality for female complaints; and on the same table Feltoe & Smith (Limited) (Albemarle Street, W.) exhibited lime-juice.

THOMAS CHRISTY & Co. (25 Lime Street, E.C.) always succeed in making with new drugs an exhibit which attracts medical men. Although on this occasion there was nothing strikingly novel in the "new remedies" there was ample evidence of the energy with which the firm are developing the galenical department. It would, in fact, appear that the sale of the crude drugs is becoming subsidiary to the manufacture of preparations of the same. This was the case, for example, with *Cactus grandiflora*, about which Dr. John Aulde, of Philadelphia, has recently written; so, too, with burra gookeroo (seeds of *Tribulus lanunginosus*), which is supposed to be the "tribulation seed" of the Bible, and is now introduced for curing seminal emissions. The fluid extract is likely to be the popular preparation of burra gookeroo; but there is also a syrup and an infusion. A thoroughly representative series of fluid extracts of rare drugs was shown, and a large number of surgical appliances, and special preparations for which the firm are agents. "Christia" and "fibrine Christia" were distributed in book form to the

visitors, and they had along with the samples "nips" of kola-bitters or kola-wine, which we commented upon some time ago. To pharmacists the exhibit of greatest interest, perhaps, was Morstadt's cachet apparatus, which we hope to refer to again.

It is some time since THE CHEMISTS' AERATED AND MINERAL WATERS ASSOCIATION (Limited) has come so prominently before medical men as it did this week. The exhibit which the association made was in every way worthy of it, since the endeavour was made to show, as far as possible, the ingredients from which the waters are made, and all the styles in which they are put up. In addition to these the association also exhibited fruit syrups.

SECOND TABLE.

At the top of this table C. J. HEWLETT & SON (Charlotte Street, E.C.) had a more favourable position for displaying their products than they had at Birmingham last year. We could not help noticing the prominence which was given to a selection of synthetic remedies; but equally attractive was a series of samples of Hewlett's concentrated mixtures, which are concentrations of popular hospital formulæ, and several of the firm's own. These, with specimens of most of Hewlett's compound liquors, of coated pills, suppositories, and compressed pellets, were arranged very tastefully.

ROBERT BAEZL & CO (St. Mary Axe, E.C.) exhibited Loeflund's dietetic milk and malt products. Here also we observed De Jong's soluble cocoa (H. Eschwege, 7 Coleman Street, E.C.); and, next to it, Stover's lime juice and cordial were exhibited by MESSRS. RIDDLE. The cordial makes a remarkably pleasant beverage.

BURGOYNE, BURBIDGES, CYRIAX & FARRIES (Coleman Street, E.C.) ranked as exhibitors on behalf of a number of American manufacturers of medicinal specialities. In this capacity they represented the Rio Chemical Company (manufacturers of celerina, aletris cordial, and S. H. Kennedy's ext. *Pinus Canadensis*), and the Sultan Drug Company (makers of cactina, a cardiac tonic in pellets). Specimens of these, with abundance of literature, were distributed.

THE SANITAS COMPANY (Limited), (Bethnal Green, E.) occupied a large share of this table with disinfectants, surgical antiseptics, and sanitary products, in all of which the odorous "sanitas" is more or less abundant. The new automatic disinfecter was well represented, and created considerable interest. We have already described the form of this simple apparatus, and may add to what we have previously said that after more than a month's use it appears to be as fresh as the day it was nailed up. The company also exhibited samples of hydrogen peroxide, with Kingzett's mercuric bactericide for surgical dressings.

THE APOLLINARIS COMPANY (Regent Street, W.) exhibited Apollinaris, Friedrichshall, and Hungarian aperient waters, with commendable effectiveness considering the unpretentious style in which these celebrated waters are put up.

OPPENHEIMER, SON & CO. (Limited) (Sun Street, E.C.), had the distinction of making one of the sensations of the museum. This was with their new mode of administering medicines, which they have named "Palatinoid." A "palatinoid" is not unlike a French perle—that is to say, it has a gummy membranous shell, but the shape is flatter. Palatinoids are used for administering solid drugs in a dry powdered state without the addition of any excipient. How the powder gets inside the shell is as great a mystery as how the apple got inside the bottle; but it is there. Mr. Oppenheimer told our reporter that by the system a great degree of accuracy is attainable in apportioning drugs into doses, and this assertion is corroborated by the report of a medical contemporary. The palatinoid shell is as impervious as a gelatine capsule, and dissolves more readily, for it is composed of acacia and sugar. When one is swallowed the first effect of the gastric fluid upon the shell is to make it burst open like an oyster and discharge its contents. An exceedingly ingenious adaptation of the idea was shown in the bi-palatinoid. Here a septum divides the shell into two, and this enables medicines to be put up in one palatinoid, which undergo decomposition when mixed. For instance, 1 grain of dried ferrous sulphate and $\frac{1}{2}$ grain of dried sodium

carbonate are put up in this way, and may be kept indefinitely without double decomposition; but whenever the palatinoid is placed in water, and the membrane dissolves, bright green ferrous carbonate is at once formed. A perfect Blaud's pill this. In the same way the chemicals for ferrous phosphate are put up; and Mr. Oppenheimer says that this is only the beginning of what he fairly claims to be a revolution in pharmacy. Besides these palatinoids, the firm exhibited liquid pharmaceutical galenicals, which they have specialised.

M. HOFF (29 New Bridge Street, E.C.) exhibited the Hamburg Hoff's malt extract, and a new drink—maltosezine—which is a combination of it and lemonade. It is very refreshing, and more nutritive than lemonade itself. The "meteor beer"—i.e. ordinary fermented beer freed from alcohol by distillation—was also shown, and Mr. Hoff had several attractive mementoes to give to visitors.

B. KÜHN (37 St. Mary-at-Hill, E.C.) had a compact and varied exhibit of Dr. Finkler's papain products. Surmounting these were three excellent photographs of living plants of *Carica papaya*. In one these the plant was seen in flower, the conformation of the large flower being shown as well as could be expected in a monochrome picture. In another both the flower and fruit were seen on the same plant. Specimens of the fruit were shown, also of the crude juice. Mr. Kühn's experience is that papain (Finkler) is getting to be better understood. It is a mistake to suppose that its full digestive power is exerted in the presence of an acid, such as hydrochloric acid, for it is more active in neutral solution, and even in slightly alkaline solution. For that reason, after administration its digestive power continues to be exerted when the food-stuff and ferment pass the stomach. Of the new preparations of this papain, one which deserves attention is the lozenge. This is a delicately-flavoured pink lozenge, containing a fair dose of papain. We find that one relieves heart-burn very quickly. The papoid-peptone, which we commented upon when it was introduced a few months ago, was exhibited in several forms, and also combined with cocoa and chocolate, and there were also several preparations of papain, such as the liquor and pills. As the agent for Brigonnet & Naville's exalgin, Mr. Kühn included this new analgesic in his exhibit, and distributed the latest reports regarding its action and best methods of administration.

On Monday evening HERTZ & COLLINGWOOD (4 Sussex Place, E.C.) had their table odorous of the halogen elements, which were diffused from the Sussex iodofume and bromofume nightlights. By Tuesday morning, however, the "Franz Josef" natural aperient water became the chief attraction of their exhibit. This water is the subject of the first part of the "Memoranda on Modern Therapeutics" which the firm have prepared for medical men. In this the principles of the water-cure are attractively set forth, and directions are given for administering a systematic course of "Franz Josef" water in imitation of the treatment at foreign spas. The firm also exhibited the Levico arsenio-ferric waters, and Jensen's cod-liver oil.

GEORGE MASON & CO. (Limited) (417 King's Road, Chelsea) had a good exhibit of their food specialities for invalids, and, in addition to giving visitors every opportunity of trying the articles, they exhibited original hospital orders and medical certificates referring to them. From these we gather that the preparations are exclusively used in several of the metropolitan hospitals. A word about them. The English beef-tea, or "O.K" bouillon, is a compound of nutritive extractive-matter of English beef with the fibrin and albumen. It is perfectly smooth, dissolves readily in water, and contains only as much salt as is required to flavour the "bouillon." This is Dr. Culver James's favourite preparation. We were also pleased with the appearance and taste of the beef-tea jelly; it is clear, firm, and of a rich flavour. Mr. Mason is proud of his malted food for infants, and explained to our reporter that he obtained the recipe from a medical gentleman who had long made a study of the subject. The food is pre-digested with the pancreatic ferment long enough to ensure its ready assimilation without the development of a bitter taste, or, indeed, altering the taste of the farinaceous ingredients further than accentuating the sweetness.

WILLOWS, FRANCIS & BUTLER (High Holborn, W.C.) exhibited a full assortment of their pharmaceutical specialities; but our reporter's attention was particularly called to

liquor calcis iodinatae, and other hypoiodite preparations, which Dr. Woods, of Highgate, has written about.

BRAND & CO. (11 Stanhope Street, W.) occupied the end of this table with every conceivable preparation of beef, chicken, mutton, turtle, and veal that would tempt the invalid to renew his strength. The courteous attendant politely asked our reporter if he thought it possible to make a quart of calf's-foot jelly for a shilling. "Why," said he, "you can't get enough of the feet for the money. It is the gelatine stuff that has brought the jelly into disrepute, although the real thing is a nourishing and grateful addition to the invalid's diet. We use no gelatine for our jelly, only calves' feet, and this is the preparation. You see it is semi-gelatinous only. That is the characteristic of the natural product." This is worth remembering. Turning now to the

THIRD TABLE

in this section of the Museum, we find ALLEN & HANBURYS' exhibit at the top of it, and this contained so many specimens that, perforce, a few of the more recent introductions can only be mentioned. Continuing the development of combinations of bynin, the firm have just introduced a kola-nut bynin, and another kolaed compound in which bynol is the basis. The liquid property of this malt-extract lends itself admirably for medication. The firm have almost abandoned the pearl-coating of pills for gelatine coating, and some nice specimens of their products in this department were shown. For our representative's benefit one of the attendants gave a demonstration of the solubility of "hypodermes," the name which Allen & Hanburys have given to compressed hypodermic tabellæ. One of these was placed in a few drops of water placed in the barrel of the hypodermic syringe (the nozzle having been removed). It began to effervesce, disintegrated, and the bubbles of gas carried the particles throughout the solvent, so that in a few seconds solution was effected, and after replacing the nozzle of the syringe the injection was ready. The phenomenon of solution is explained by the fact that in addition to the active ingredient each tabella, instead of the substances which are generally used as diluents in hypodermic tabellæ, contains an acid or acid salt, and a carbonated alkali in such proportion as to produce when placed in water a neutral or, where desirable, a faintly acid solution. These tabellæ were shown in neat pocket-cases with syringe, pipette, and a tiny minim measure. Another good thing which was shown was a nurse's companion, to attach to the chatelaines; this is fitted with scissors, forceps, and other simple instruments required by nurses, and it has a purse for holding plaster, silk, and the like.

INGRAM & ROYLE (52 Farringdon Street, E.C.) exhibited Esculap, Carlsbad, and Vichy waters, with the Carlsbad Sprudel salts, and Vichy salt; Iczenges, and liqueur. The chief attraction of their stand, however, was the Flitwick chalybeate water, which is of the colour of sherry. Although this is not the first time that the water has been brought under the attention of medical men, its peculiar properties have recently drawn renewed attention to it. The water contains almost one grain of peroxide of iron in each ounce, and part of this, at least, is in combination with malic and other vegetable acids. It is probable that these arise under similar conditions to what produce the unknown organic acid which is present in the water drawn from the moorlands of the North, so that it is conceivable that in passing through ferruginous strata the Flitwick water gets its charge of organic salts of iron. As such salts have lately been highly spoken of for anaemic patients, the Flitwick water created considerable attention.

The exhibit of the FRENCH HYGIENIC SOCIETY (Conduit Street, W.) had the distinction of being attended by a lady, who showed an intelligent interest in her goods. These were the society's coca preparations. She told our representative that coca is by no means going out of fashion. Athletes and military men are taking it up with enthusiasm, and a week ago an Alpine climber took away with him a dozen boxes of the society's coca pastilles. Even ladies use the drug, those who object to stimulants taking it in the form of coca tea, which is a blend of three Ceylon teas impregnated with a fluid extract of coca. "The tea itself," added Madame —, "is a three-and-sixpenny tea, and we charge it with the coca, and put it up in these sealed tins for chemists to sell at 4s."

WHITAKER & DONISTHORPE (12 Oat Lane, E.C.) exhibited "Sedox." This is a cotton-wool-like fibre, but more silky in appearance, and is a natural Indian fibre, free in this state from oil, and therefore absorbent. It is also claimed to be antiseptic, something which it naturally contains making it so.

JOHNSON & JOHNSON (Limited) (Australian Avenue, E.C.) occupied the end of the table with an attractive exhibit of plasters, surgical-dressings, and Upjohn's pills. Mr. Gilmore, the London manager of the firm, was in charge when our representative called, and this is the gist of their interview. First, as to plasters. The constituents of the belladonna plaster were shown—indiarubber, olibanum, olive oil, and belladonna-root are amongst them. "We make no secret of the fact that the plaster is made from the root," said Mr. Gilmore. "We consider that more reliable than the leaves." Another notable plaster is emp. cantharidis, called by the firm "Canthos." About this there is an old-fashioned booklet, entitled "Blisters and Blistering," in which it is stated that the plaster is of B.P. cantharidis strength, but produces perfect vesication in from two to three hours, and that painlessly. This is due to the nature of the basis, in which, we believe, tar plays an important part. Amongst many other plasters which were exhibited, we should single out "Gelatole," which is fine silk adhesive plaster of remarkable softness. The surgical dressings made by Johnston & Johnston have this peculiarity (we refer to Linton absorbent gauzes), that they are always moist. The effect of this is that they take very kindly to the skin, and uniform distribution of the antiseptic is ensured. The gauzes, ready rolled, are put up in tins, so that a portion need only be cut off as required, without undoing the rest. "King Cotton" (another old-fashioned booklet) gives the technical history of cotton, and it was amplified in the museum by an exhibit of five specimens, showing the evolution of the cotton—from the field to the oil-free absorbent wool. Ligatures and bandages were also exhibited. The Upjohn friable pill is a marvel in the art of pharmacy. That illustration which readers of THE CHEMIST AND DRUGGIST are familiar with of a thumb pressing a pill into powder is no exaggeration. Literally, the pills are powder without excipient, coated with sugar, except in the case of reducing-bodies, such as potassium permanganate, which are coated with kaolin. How the pill are made we do not know, nor could Mr. Gilmore tell us, but pills they are, which do not lose their shape, and yet disintegrate rapidly. Tiny granules are produced in the same style. They are made in the United States by the Upjohn Pill and Granule Company.

One of the most varied exhibits in the museum was that contributed by JOHN RICHARDSON & CO. (Leicester). It consisted of pharmaceutical preparations, surgical appliances, medicine-cases, and dispensing-cabinets, and a selection from the firm's medical publications. One naturally expects to find in an exhibit from this firm coated pills to be in force, but these by no means threw other manufacturers into a subsidiary position. As far as could possibly be done in a selection, the attempt was made to show typical preparations of the British and United States Pharmacopeias, and with these we may rank the specimens of suppositories, bougies, and pessaries, which were neatly arranged in small glazed cases. Messrs. Richardson & Co. make many medicinal specialities, and if there is a combination which doctors take a fancy to they are sure to produce it. For instance, under the name "Mikozone" we observed a compound hypnotic, combining the active principles of henbane and Indian hemp in a fluid state with a bromide. There were also some nice specimens of Iczenges, pastilles (glycogelatine), and compressed drugs made by the firm. As we have said, medicine-cases chiefly intended for the use of doctors were a feature of the exhibit, and in conversation with the attendant our reporter gathered that the experience of the firm is that dispensing by doctors is on the increase rather than the opposite—in fact, some who had given up dispensing have returned to it again.

As a relief to the almost unbroken line of English and American preparations, WILCOX & CO. (Oxford Street, W.) had a good display of the leading French manufacturers. These our "Town Traveller" has so recently described that we need not repeat what he has said. Vin Mariani, cigarettes de Joye, Hunyadi Janos water, and Nativelle's

granules were amongst the principal exhibits. Medical visitors received a specimen case of Rigaud & Chapoteau's preparations—viz., perles of apioline, mormhuol, mormhuol-creosote, and santal-Midy.

WYLEYS & CO. (Coventry) had an excellent display of synthetic remedies, and in connection with pyotkatin showed a number of the forms in which aniline dyes are used in medicine. There were also some special preparations of sczoidal. In the suppository department they were particularly strong, a series of "low melting-point" suppositories and pessaries being the outcome of notes recently published in *THE CHEMIST AND DRUGGIST*, in which it was shown that many drugs enter into combination with cacao butter, and raise the melting-point of the mass above the temperature of the body, so rendering the pessary or suppository inefficient in action. In the series exhibited this tendency is overcome so as to ensure a constant melting-point of 90° F. A similar regard for constancy is shown in the hypodermic solutions devised by Mr. H. W. Jones, chemist to the firm. A series of these was on the table, permanency being their characteristic. These, with disintegrating pellets, tablet-tributates, and liquid galenicals and elixirs, made up the exhibit.

F. NEWBERRY & SONS (King Edward Street, E.C.), on behalf of W. R. Warner & Co., of Philadelphia, exhibited the sugar-coated pills of that firm, demonstrating their solubility. The new antalgic saline which Messrs. Warner have introduced was shown, along with other granular preparations.

The new antiseptic "lysol" was exhibited by F. W. BERK & CO. (1 Fenchurch Avenue, E.C.). This is to be a rival of creolin and carbolic acid. Dr. Bottler, the managing director of the works at Hamburg, was present at the meeting and explained to our reporter that in the meantime steps are to be taken to introduce the antiseptic to surgeons in this country. So far it has only been investigated in Germany by bacteriologists, chemists, and surgeons, and the reports which they have published are very flattering. Lysol contains the three cresols of coal-tar oil, without the phenols, and dissolves in water to form a clear, amber coloured solution. It was shown at the Museum in this state, along with tar-oil, crude carbolic acid, and creolin similarly treated, the oil and acid sinking in the water, and the creolin forming a milky emulsion. Alongside of this exhibit the BOUILLOON FLEET COMPANY (LIMITED) showed their own preparation, and also Kemmerick's peptone of beef. In the St. Peter Street exhibit we observed that J. SCHWEPPE & CO. (LIMITED) (51 Berners Street, W.) exhibited a new syphon, in which the whole of the interior parts are non-metallic. The tube is bent to one side, and there is a vulcanite stopper at the bottom which permits the interior to be cleaned out thoroughly. The arrangement of the tube ensures the absence of "deadness of taste," and the contents come out evenly.

SURGICAL SECTION.

In the second half of the tennis-court exhibits of surgical instruments took up the larger part of the space. The principal exhibitors were ARNOLD & SONS, West Smithfield, whose exhibit comprised mainly special instruments of recent introduction, which have been devised by eminent surgeons; beside them John Richardson & Co., as already stated, had also a similar exhibit. LYNCH & CO. (Aldersgate Street, E.C.) made a feature of aluminium and celluloid instruments. The aluminium, owing to its lightness, is adapted wonderfully well for the construction of special forms, such, for instance, as uterine curettes and depressers, and various specula, the lightness of touch in each case, together with the great durability of the metal, being special features. Apart from the purely surgical exhibits, the firm also showed a nice variety of spray-producers, with earthenware and Bohemian-glass flasks, in which old-fashioned patterns were reproduced, and others exhibited designs conforming to modern aesthetic tastes. There was a nice selection also of cut-glass bottles and flasks for perfumes, and in association with these we observed a very fine assortment of Ricksecker's manufactures. The exhibit, on the whole, reflected great credit on the firm's enterprise.

DARTON & CO. (45 St. John Street, West Smithfield, E.C.) are regular exhibitors at the Museum, one of the leading

lines being clinical thermometers, and these, on this occasion, they again showed in wonderful variety; but when our reporter reached their table his attention was at once attracted by Mr. Phillips to a new patent constant-current battery, in which there is a combination of Leclanché cells. "This is how it works," said Mr. Phillips, as he attached to it a tiny electric lamp at the end of a thing like a throat-atomiser. On holding this in the mouth, there was a brilliant illumination of the fauces, such as cannot be obtained by any other means. We must speak of this matter more fully on another occasion, and, meanwhile, we may add, regarding Messrs. Darton's exhibit, that it included microscopes, opera and field glasses, telegraphic apparatus, and a very good collection of telephones, which at present, owing to the expiry of patents, are good business.

HOCKIN, WILSON & CO. exhibited surgical instruments and pharmaceutical preparations in conjunction. We saw here a very nice feeding-cup, devised by Miss Homershen. This cup is half covered on the top, but instead of the liquid coming through it at the angle there, a short spout is inserted, about a quarter of an inch from the top. This is large enough to permit the patient to drink with freedom. The firm have recently introduced a new caustic-case, the form of which is shown by the illustration. This, it will be seen, enables the paint to be grasped firmly, and is efficiently protected while not in use. Amongst the recently-introduced pharmaceutical specialities we observed liquor mangano-ferri peptonat, and liquor ferri albumenat. For some time such preparations have been highly extolled by Continental physicians, and it is in response to request for them in this country that Hockin, Wilson & Co. have introduced these.

The LIVERPOOL LINT COMPANY also exhibited in this section, in addition to cotton-wool and bandages, a new series of transpirable wool goods, for underwear. This material is a stockinette, with a nap on one side, which is possessed of a certain amount of elasticity, and when worn ensures a pleasant degree of warmth, with perfect transpiration of the body exhalations. It is used for chest-protectors, and vests to button in front. We observed, also, that the company have introduced a sensible-looking body-belt, made from the same material. They are also sending out cotton-wool interleaved with blue paper in the American fashion.

J. COXETER & SON (Gower Street, W.C.), through Mr. G. E. Bridge, their local agent, exhibited a fine selection of surgical instruments. Bournemouth chemists are very enterprising, and Mr. Bridge is not behind his colleagues, for he has one of the finest pharmacies in the town, in which there is a room specially furnished for fitting surgical appliances, and he carries a very complete stock of instruments. One to which he specially called our attention was a dry battery, the elements being those of a Daniells' cell, supported by a gelatinous composition. Without any other agents, the elements when connected, produce a steady current, and, as there is very little action upon the metals, the powder practically lasts indefinitely.

Mr. WILLIAM JONES (Bournemouth) had a very attractive exhibit of his own pharmaceutical specialities, amongst which we noticed a nice line of elixirs, and a sanitary sputarium, made of ornamented tin, the lid of which is so constructed that it can be opened either by the patient or nurse. Mr. Jones also showed on his table a selection of vinolia preparations.

Beside this F. A. DAVIS (Berner Street, W.) had a good exhibit of medical publications, and a new adhesive electrode manufactured by Nehmer & Co. The electrode is made in various forms, and is a pink gelatinous composition, which adheres to the skin, and when there gives rise to a mild current of electricity.

Messrs. FERRIS (of Bristol) exhibited artificial limbs; indeed, the exhibition of surgical instruments would require far more space to describe than we can afford to it in this issue. We may mention that S. KUTNOW & CO. (66 Holborn Viaduct, E.C.) exhibited an improved effervescent Carlsbad powder. This contains the natural salts of the Carlsbad water, dried and combined with an effervescent material.



It is, of course, more compact than the crystals, and has the advantage of being pleasanter to take. The same firm exhibited an anti-asthmatic powder.

THE MEETINGS

of the association commenced in the Town-hall on Tuesday at 11.30 A.M., when Dr. W. F. Wade introduced Dr. Roberts Thomson, who took the chair as president. Various annual reports were brought forward, discussed, and adopted. In the afternoon a service was held in St. Peter's Church, and Canon Wilberforce preached a sermon from Romans viii. 18 and 19. He dwelt on the fact that there was not a profession on the earth which was in possession of such opportunities of ministering the whole man and not to a part of him, and of awakening the moral consciousness in the patient, and of conducing to the physical as well as spiritual emancipation of groaning, travailing creation.

The evening meeting to hear the President's address was held in the Town-hall at half-past eight o'clock. The President, on behalf of the association, extended a hearty welcome to the foreign and colonial members and delegates, inviting them to be seated on the platform. The foreign representatives were: — Drs. Anvard (Paris), Benedikt (Vienna), Cordes (Geneva), Palk (New York), Payn (Cape Town), Ranshoff (Cincinnati), Carey (New South Wales), Hutchinson (Monte Carlo), Fokker (Holland), Fretz (St. Kitts), Goodchild (Italy), Lefevre (Melbourne), Lennander (Sweden), Nordhorst (Wiesbaden), O'Dwyer (Malta), Coldstream (Florence), Segur (New York), Siordet (Mentone), Beck (Cape Town), Frankish (New Zealand), Moriers (South Australia), Stewart (Montreal), Morse (Jamaica), Gomes and Freeland (Antigua), Anthoniz and Shepherd (Barbados), Beek (South Africa), Greve (British Guiana), Hojel (Bombay), Allison (Madras), and Sinclair (Burmah).

Dr. Thomson then proceeded to deliver his address, which dwelt mainly upon the growth and development of Bournemouth, the importance to medical men of the study of climatology, and on sanitary legislation. He said regarding

BOURNEMOUTH

that it has a climate which in the winter is, for England, dry, with a fair amount of sun, and sheltered from all quarters except the south. Invalids, therefore, get out a great deal, and can in the inner roads escape the wind while still keeping in the sunshine. In the summer the beach is available at all times for bathing, there is shade to an extent which can seldom be found at the seaside; also, as the result of being in a bay, there is always a breeze in warm weather. Where is there a seaside resort in England with more trees, and the climate, because of the dryness, not relaxing? It follows, of course, from all this that there are classes of cases for which the climate is not suitable, and which do not get on well here. Those bronchial cases, with very irritable cough, which require a moister and more soothing climate, are better elsewhere. Many throat cases, with very irritable mucous membrane, also do better in moister climates, and away from the sea. And there are some forms of neuralgia which seem to be aggravated either by the dry air, or by proximity to the sea. But this short list nearly exhausts the forms of invalidism which may not receive benefit from a sojourn here. When Dr. Thomson first began work in Bournemouth a very large majority of the patients were cases of lung-trouble. Now persons broken down in health from every possible cause resort to the place, and the direct salutary influence on many chronic maladies—such, for instance, as Bright's disease—is very marked, and may be confidently looked for. After referring to various Bournemouth hospitals, the president proceeded to comment upon the present position of

MEDICAL OFFICERS OF HEALTH IN ENGLAND,

and on the working of the most recent legislation in this matter as found in the Local Government Act of 1889, which established county councils throughout the land.

From inquiries which he has made, he finds that, "so far as the English Act is concerned, the result is not satisfactory. In 37 counties nothing whatever was being done to appoint medical officers of health; in 4 counties the subject is under consideration; in 7 counties appointments had been made

under the Act, at salaries from 800*l.* a year, and 200*l.* allowance for expense, in Staffordshire, downwards. It cannot, therefore, be said that the county councils have, for the most part, taken any active steps. This apathy may have a triple cause. It may arise from (1) a want of interest about sanitary work; (2) satisfaction at the present state of sanitary supervision and the present position of medical officers of health; or (3) from the feeling that the powers vested in the councils are not such as to make it worth while to appoint any such officials. After showing the lack of enthusiasm which prevailed in country districts and small towns in sanitary work, and that sanitary administration has been linked with the Poor Law, with the result that sanitary matters are dealt with by persons having no special knowledge of the subject, he suggested the following modifications for consideration:—

1. That the appointment of medical officers of health by county councils be obligatory in England, as it is in Scotland.

2. That these appointments once made shall not be upset, except by the central authority, as has been provided by the Public Health Bill for London.

3. That the salaries attaching to such office be sufficient to attract highly-educated and efficient men, and that they be called upon to devote their whole time to the duties of their office.

4. That every part of the kingdom be brought into sympathetic communication with the central board, upon which the medical element shall have real and substantial power.

Dr. Thomson considered that on the medical officer of health depends in a very large degree the motive power of sanitation, and for this purpose the officer should not only be highly trained, but he should be appointed over an area large enough to require his whole time, and he should occupy a position independent of all local jealousies, and freed from such restraints as the present uncertain tenure of his office inevitably causes. He believed that, with improved organisation and increased scientific control, zymotic diseases would, in a few years, be reduced to very small proportions, and every district in the land would be relieved from ever-threatening causes of trouble and distress. At one time leper-hospitals were numbered in England by the hundred; and it was as possible, he thought, by proper sanitary legislation, to distinguish many of those infectious maladies which at present inflict the community.

After a vote of thanks had been accorded to the President, the meeting adjourned, resuming on Wednesday for sectional business, which was principally transacted at the Sanatorium.

WEDNESDAY'S BUSINESS.

The address on medicine was delivered in the Town-hall at 3 o'clock by Dr. Lauder Brunton, who spoke of the changes that had occurred in medicine during the last quarter of a century. Dealing with advances in knowledge and teaching due to the experimental method, he showed that a great increase had occurred in the knowledge of the nature, causation, and treatment of diseases by the profession as a whole; yet, perhaps, a still greater gain to medical science was in the adoption of the experimental method, by which most of our recent knowledge had been acquired, and from which they hoped for greater advantages in the future. But the greatest advance made in the last quarter of a century was in the direction of fevers and diseases of the nervous system. The rapid increase of medical knowledge had been due not merely to the constant use of old methods, but to the introduction of new ones. As an illustration of how the seemingly foolish researches ended by confounding the wise, he could give no better than Pasteur's researches on tartaric acid, which had led up to results so valuable to the world. Dr. Brunton spoke also of the advance in medical science as shown by anti-septic surgery.

In the section of Public Medicine, Dr. Parsons, of the Medical Department of the Local Government Board, whose report on influenza we have discussed, communicated a paper on the same subject, which was substantially an abstract of the report.

In a paper on diphtheria Dr. Alfred Carpenter stated that cases of this disease first began to be common in rural towns between 1860 and 1870, and between 1870 and 1880 the towns became affected. Some cases were caused by the

distribution of infected milk, some by contagion in schools; but many of the isolated cases had nothing to do with the infection of milk. In some cases it had been found that when cesspools were cleared away and the basement of houses rendered dry and damp-proof the disease had disappeared. He also showed that warmth and moisture and absence of light are necessary agents for the propagation of diphtheria.

Dr. Vicary Snow, president of the Therapeutics section, devoted his address to Koch's treatment of tuberculosis.

There was a reception in the Royal Bath Hotel by the President in the evening, and, taking advantage of this engagement of professional visitors, the exhibitors in the Annual Museum and their assistants held

A SMOKING CONCERT

in the Winter Gardens of the Hôtel Mont Doré. The arrangements for this had been made by Mr. Fuller (Lynch & Co.) and Mr. Ingram (Warrington Chemical Co.), and although got up with great rapidity, a very high-toned concert was given. A large number of medical men attended, a few ladies even looking in on their way to the ball at the Royal Bath Hotel, and when Mr. A. H. Mason, the chairman, rose to open the proceedings the audience numbered about 250. In his remarks Mr. Mason said that the present year marked a new era in the relations between the Association and the exhibitors. Hitherto the firms who contributed their energies and money to make the annual museums a success had been scurvy treated by the central authorities; but on this occasion—and this he wished to say on the part of all exhibitors—the local committee had exerted themselves to the utmost on their behalf, and he desired to express most cordial thanks to Mr. Mahomed and his associate secretaries for all they had done. He also hoped that in future years the Association officials would treat exhibitors as courteously and in as business-like a way as the local committee had done in this case. The concert then commenced, Mr. Helbing opening with a pianoforte solo, and he, with Mr. Scott (B. W. & Co.), acted throughout as accompanists. The gentlemen who contributed to the entertainment were the following:—Messrs. Ball (B. W. & Co.), G. E. Bridge (Bournemouth), T. Thompson (Robertson & Co., Edinburgh), W. Sandford (Hockin, Wilson & Co.), D. M. Ingram, H. B. Mason (Seabury & Johnson), Gilbert Christy (T. Christy & Co.), — Asman, S. E. Schotter (Warner & Co., Philadelphia), and H. B. Fuller (Lynch & Co.). Some of them were down on the programme twice, and so acquitted themselves that they had to sing again. It was such an enjoyable concert that it is not likely to be the last.

RETAIL SALE OF METHYLATED SPIRITS. NEW GENERAL ORDER.

THE following is a copy of a General Order which has just been issued from Somerset House:—

No. 13. Inland Revenue,
1891. Somerset House, W.C.
July 20, 1891.

ORDERED,—

That the attention of the officers of the Department be directed to the following regulations, which are to be observed with regard to the preparation of methylated spirits for sale by retailers.

1. An authorised methylator must in the presence of the proper officer of Inland Revenue mix with and dissolve in all methylated spirits, to be supplied to a retailer of methylated spirits for sale by him, a quantity not less than three-eighths of one per centum by volume of mineral naphtha of a specific gravity of not less than .800. The mineral naphtha must before the mixing thereof be approved by the Board, samples being taken and dealt with as directed in Licence Instructions, page 69, paragraph 4.

New forms of requisitions have been prepared for obtaining methylated spirits for sale by retailers, and supervisors should apply to the Controller of Stamps and Stores for a proper supply.

2. Essential oil or other flavouring matter must not, with-

out the express sanction of the Commissioners of Inland Revenue, be added to or mixed with methylated spirits.

3. A retailer of methylated spirits must not sell or have upon his premises for sale methylated spirits containing any essential oil or other flavouring matter, or in which mineral naphtha has not been dissolved.

4. In any case where methylated spirit for sale by retail is supposed from its odour to contain essential oil or other flavouring matter, or where the spirit, by remaining clear when diluted with water, shows the absence of mineral naphtha, a sample should be forwarded to the laboratory under the usual regulators.

5. A person who has been authorised to receive methylated spirits for use in any art or manufacture carried on by him, whether he holds or does not hold a licence as a retailer of methylated spirits, must obtain all methylated spirits from an authorised methylator only, and in the manner directed by sub-section 4 of section 124 of Spirits Act, 1880.

6. When in any case it is, from local circumstances, deemed desirable that an account should be kept by a retailer of methylated spirits in accordance with the terms of the 126th section of 43 & 44 Vict. c. 24, the Supervisor should at once report the circumstances, and, if enjoined, the account should be in the following form:—

Methylated Spirit Retailer's Stock Account.

Requisition			Permit			Account of Sales					
Date	No. of Gallons requisitioned	Date	From what Methyl- sugar received	Of what Place	Gallons	Date	Full Name of Person to whom sold	Of what Place and Adress	Trade or Occupation	Gallons or Part of a Gallon Sold	

The present stocks of ordinary methylated spirits for sale by retail should be disposed of before January 1, 1892. The other regulations specified are to be in force from September 1, 1891.

A copy of this Order should be delivered to every authorised methylator and every retailer of methylated spirits, and a memorandum must be entered of such delivery in the store and general register of the station.

By the Board,
ROBERT MICKS,
Secretary.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

WALTERS—CRAGG.—At the Parish Church of St. John the Baptist, Croydon, on Thursday, July 30, by the Rev. Hy. Glover, vicar of St. Mary Magdalene's, Addiscombe, assisted by the Rev. W. B. Taylor, M.A., Mr. Leonard Walters (of Thompson, Walters, Hole & Co. (Limited) to Lydia Amy Cragg. The ceremony was fully choral, and the church was gaily decorated with flowers for the occasion. A company numbering about 300 was present in the church. We understand that the bride and bridegroom have gone to the Lakes and Scotland for their honeymoon.

DEATHS.

BARRETT.—On July 12, Mr. William Henry Barrett chemist and druggist, Brigg, Lincs. Aged 45.

HOUGH.—On July 16, Mr. William Hough, chemist and druggist, Corn Market, Doncaster. Aged 42.

TURTON.—On July 7, Mr. William Turton, chemist and druggist, St. Peter's Street, Leeds. Aged 67.

WOOD.—On July 19, Mr. John Wood, chemist and druggist, Drake Street, Rochdale. Aged 45.

THE 'SANITAS' DISINFECTOR (PATENTED).



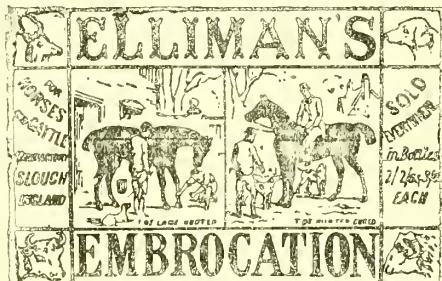
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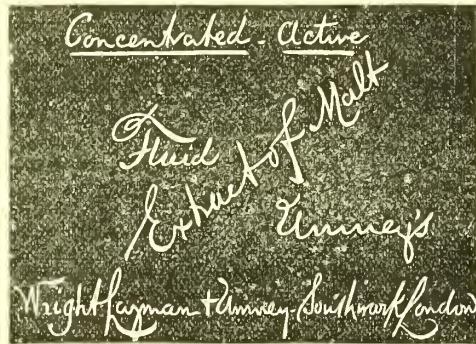
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BOURNEMOUTH.

For the nonce Bournemouth has been as full of doctors as invalids. Thither this week they have flocked from all parts of the kingdom, and even from remote places abroad, to take part in the fifty-ninth annual meeting of the British Medical Association. The attendance, we believe, has been up to the average, and there was a feeling amongst the members of the Association that it is much pleasanter to meet in such a town than in a smoky city. Unfortunately, there are few places in the kingdom like Bournemouth. It has unequalled natural advantages, and its popularity as a haven of rest for the wearied, and temperate climate for the phthisical, give it distinction above most sea-side towns in respect to medical matters. This fact was well exemplified by the manner in which local retail pharmacists took part in the Annual Museum of the Association. The circumstance was a proof of the fact that pharmacy is very much what a population makes it; it varies with the occupations and health-conditions of the town dwellers, and there is little scope for new developments where the pharmacist's customers are sturdy farmers and field labourers. Towns like Bourne-

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, AUGUST 1, 1891.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

CHEMISTS' TRANSFERS.

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1.—£1,000.—LONDON, N.W.—Dispensing and Retail Business of good class; very largely ready money; returns between £900 and £1,000; profits very good; well-fitted shop and excellent stock; full examination permitted; price £750.

2.—£1,100.—LONDON, W.C.—Retail and Dispensing; handsomely-fitted shop and good stock; returns over £1,000 yearly; all good profitable trade; several good proprietaries included; lock up shop; price £800.

3.—£700.—LONDON, N.—Dispensing and Retail; established many years; good class select business; very handsome shop; returns between £700 and £750 last year; increases yearly; very good profits; good house, on lease; price £700; full investigation invited.

4.—£1,150.—LONDON, W. (Suburb).—Good-class Dispensing and Retail; returns last year £1,150; all profitable business; well-fitted attractive shop and comfortable house; price about £1,250.

5.—£1,000.—LONDON (Good Suburb).—First-class locality; very old-established good-class business; returns £1,000 yearly; large shop and well stocked; good garden, &c.; full particulars on application, with reference.

6.—£900.—LONDON, N.W.—Dispensing and Retail Business of very good class; established many years; returns about £900; very profitable; chiefly Dispensing; the shop is well stocked; house is very convenient; about £800 required.

7.—£500.—LONDON, N.—Ready-money locality; Retail Business with Prescribing; established many years; returns nearly £500 yearly; large shop, comfortable house, 6 rooms; price about one year's returns, or offer considered.

8.—£400.—LONDON, N.W.—Very handsome shop and good stock, with large house attached; returns about £400 yearly; vendor, having other engagements, will accept any reasonable offer; good opportunity for a beginner.

9.—£850.—LONDON, N.—Main road; good-class Dispensing and Retail, with some Prescribing; returns nearly £30 yearly; single-fronted shop and good stock; price about £600; open to an offer.

10.—£800.—LEICESTERSHIRE.—Good family Business; returns nearly £800 yearly; very good profits; some good proprietary articles; large handsome shop and good residence, with garden, &c.; price about £700.

11.—£1,650.—EASTERN COUNTIES.—Old-established Business; commodious premises; good house, attractive garden; returns nearly £1,650, with good profits; vendor, having other engagements, will accept any reasonable offer.

12.—£700.—SUSSEX.—Good town; Retail and Dispensing of good class; returns nearly £700 yearly, with good profits; well-fitted shop and good stock; good 6-roomed house on lease; price £180.

13.—NORFOLK.—Large town; good class Retail and Dispensing, with good scope for Prescribing; the returns increase yearly; last year (exclusive of Post Offic.), £33; full prices for everything except patents; crocer shop, very prettily situated, and well fitted; good sized comfortable house; price about one year's returns.

14.—NORFOLK.—Near a large town and great agricultural centre; established Businesses, Retail and Dispensing; returns £550; well-fitted shop, plate glass front and good stock; good 8 roomed house, with good walled-in garden; rent low; price £350.

15.—SEASIDE (South Coast).—Retail and Dispensing Business; returns about £400 yearly; double-fronted, well-fitted shop; house contains 7 or 8 rooms, &c.; price to an immediate purchaser, £320.

16.—OXFORDSHIRE.—Pretty locality; good market town; an old established Business; returns nearly £1,000; profit, net, nearly £400; good house, with stable and gardens; price about £1,000.

17.—SEASIDE.—Good-class Dispensing and Retail; established many years; returns £700; profits very good; large and well-fitted shop; stock good; good-sized house, situate in main street of a favourite watering place, South Coast; price £600.

18.—ESSEX.—Easy distance of Bank of England; Retail and Dispensing Business; no heavy trade of any kind; returns last year £950, increasing; profits 33 per cent.; good 8 roomed house on long lease; price £850.

19.—BIRMINGHAM.—Mixed Business, with Prescribing; held by vendor over 20 years; returns between £7,000 and £750, with very good profit; rent low; good house and shop, may be rented or purchased; price £700.

20.—BERKS.—Large town; good-class Retail and Dispensing; returns nearly £800 yearly; handsome shop and good stock; good-sized house; rent very moderate; vendor will consider a reasonable offer.

21.—LANCASHIRE.—Large town; Retail and Dispensing Business, situate in main street; returns between £900 and £930; handsome shop and good house; vendor will sell at valuation or lump sum, about £750.

22.—SOMERSET.—Family, Dispensing, and Prescribing Business; returns £650 last year; very good profits; well-fitted shop, plate-glass front, and good stock; good house and large garden, stabling, &c.; rent low; price £510.

23.—BUCKS.—Retail and Dispensing Business; returns £320 last year, increasing; very good profit; single front, well-fitted shop; comfortable house and large garden; price £2,100.

24.—WESTERN TOWN.—Retail and Prescribing Business, situate in main street; returns £470; good sized house, with large garden; rent low; price about £300.

Particulars of any of the above will be furnished on application.

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IN a manufacturing village, South Devon, population about 3,000: no opposition; returns nearly £100; price £280; a Manager, with a view to an early purchase, would be treated with. Geo. Sibberiff, Chemist, Paignton.

FOR Sale, by trustees, in consequence of death of owner; good mixed Agricultural Druggist's Business, with the premises, where same has been carried on for many years; stock small. Apply, W. H. Brown, Solicitor, Bristol.

FOR immediate disposal, capital Chemist's Business, Fleetwood, with good Dispensing and Prescribing department attached: price, including goodwill, fixtures, &c., £330; good opportunity for man with little capital. Apply, Carter, Estate Agent, Blackpool.

NORTH LONDON.—Two Dispensing and Light Retail Businesses; very profitable; present hands 12 years; with personal attention easily improved; no need apply without £1,700 at command. Address, with references, to J. J. Hearow's, 33 Southwark Street.

FOR immediate Sale.—A genuine old-established Mixed Business; market town, near London; illus's cause of selling; price about £1,200, or valuation; no agents. For full particulars, apply, "Business," c/o Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, London.

FOR immediate disposal, a light cash Retail and Prescribing Business, in a thickly populated neighbourhood; a good opportunity for beginner; proprietor taking larger concern; double-fronted shop and convenient house. Full particulars and price to B. K., 3 Devonshire Road, Chiswick, Middlesex.

To be Sold, old established and profitable Wholesale and Retail Druggist and Dispensing Chemist's Business, situate in best business street; unexpired lease of five years at £100 per year. Apply to Webster & Styring, Solicitors, or to W. Hubert Smith, Chartered Accountant, Hoole's Chambers, Sheffield.

YORKSHIRE.—Thoroughly genuine Retail, Dispensing, and Prescribing Business, with a little local Wholesale; net profit for the last 3 years average nearly £400 yearly; owner retiring, will stay to introduce; ret only £25; price £700 inclusive. Address "Yorks," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON, W.—Unopposed Retail and Prescribing Business, returning £10 weekly, increasing steadily; good house and garden at a low rental; having other engagements, and rather than put manager in, owner will accept £200 for everything. Further particulars on application. "Oleum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON.—Important in thoroughfare; a very profitable Retail, Dispensing, and Prescribing Business, with a large sale of proprietary articles; net profits under management £350 per annum; owner going abroad, at once, will accept £100 cash, and balance by instalments. "Stannum," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

To Investors and Promoters of Public Companies.—For Sale, owing to illness of proprietor, an old-established Patent Medicine Business, consisting of several leading articles kept and sold by all chemists in England and colonies, and protected by valuable trade marks; very suitable, and a sound concern to form a limited company; cash price £1,000, or offer. Letters only to Deay, 23 Florence Road, S.E.

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Trade Valuers, Transfer Agents, and Accountants

15 WALBROOK, E.C.

NOROLK.—Old-established Retail and Dispensing; returns approach £600; low rent; convenient house, with nice garden; price £350; worth attention.

SURREY.—Unopposed good-class Retail and Dispensing, with valuable agency; returns £750; small premium for goodwill and valuation.

LANCS..—Retail, Dispensing, and little Mixed; returns £1,100; price valuation of stock and fixtures; cash capital required about £500; net profits over £500.

KENT COAST..—Good class Retail and Dispensing Business in favourable health resort; returns £900, rapidly increasing; price £800.

HANTS.—Light Retail and Dispensing; returns £700, and increasing; large convenient premises; nice garden; low rent; price £450.

LONDON, S..—Good-class Retail and Dispensing trade; returns £500, low rent; price £350; capital position in marketing thoroughfare.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALTY. TERMS ON APPLICATION.

BUSINESSES FOR DISPOSAL—Continued.

FOR Sale, a small Business on the South Coast; or Manager with view to purchase. W. W. Lee, 104 St Margaret Street, Dover.

THOMAS TOMLINSON & SON, Transfer Agents, 9 New Cannon Street, Manebster, recommend chemists before taking businesses to consult them without charge, and send for printed list of those they have for disposal; 40 years' experience.

BUSINESS for Disposal.—Shop in the leading thoroughfare of the Borough of Crw; has been occupied by chemists over 30 years; capital opening for a Dentist or a Druggist practising Dentistry; rent very moderate; no going out to pay. Henry Taylor, High Street, Crewe.

GENUINE old-established good-class Country Retail; good house and garden; net profits about £900; price £900; part can remain with security, or Partnership with good man and ultimate succession entered. "Chemist," Newbury, 1 King Edward Street, London.

GENUINE.—Increasing Business; South Coast town; population 18,000; high-class customers; good prices; small patent trade; Dispensing and Prescribing; full investigation to prompt purchaser with reference; £450. "Trustworthy," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.O.

£75 Cash; bargain; fittings alone worth more; unopposed; no Chemist near; Dispensing and Prescribing; splendid chance for Dentist, not one near; house with private entrance; well stocked; excellent Proprietaries; double fronted shop, good mahogany fittings; good reason for disposal; excellent locality. By letter, "Rondeletia," 17 Applegate Road, W.

SEASIDE (South-West).—Good-class Retail, Dispensing, and Prescribing Businesses, all ready money; the best position in a popular health and pleasure resort, 80 miles from London; returns £1,000; net profit £400; price £800 or valuation; well fitted and stocked; never before changed hands; owner ordered abroad for health. Address, "Chemieus," c/o Mr. Levien, 9 Ely Place, London, E.C.

MIXED Retail ready-money Dispensing, Prescribing (very profitable Wine and Spirit paving 30 to 50 per cent.); returns average over £1,000 last 7 years, and increasing; over £1,100 in 1890; cash required about £100 or valuation, at which it will considerably exceed; rent £35; good house and premises; several good agencies and proprietaries; owner retiring; rare chance; returns last half-year nearly £600. 27/18.

£859.—LONDON, N.—A genuine Retail and Dispensing Business; established 17 years; handsome shop, newly fitted, well stocked; splendid position, and capable of great extension; returns, under management the last 12 months, £959; net profits £310; price only £600; part can remain on approved security; every investigation allowed; illness sole cause of sale. Mr. Stocker, Messrs. Herrings & Co., 40 Aldersgate Street.

AND OLD-established Family Retail and Dispensing Business, in North Midlands, with fittings; agency returns £800; population about 2,000; no opposition within six miles; nearly full prices; good opening for dentist; ret £25, £4 let off; good house, stable, garden; price £400; owner taking larger business. "Chemieus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

WANTED, a small, sound Business, open to investigation and capable of improvement; market town in West of England preferred. Particulars to J. 104 Bonport Street, Barnstaple.

AND GENUINE Retail, Dispensing, and Prescribing Business, in small market town; South or Midlands preferred; returning £600 to £1,000 yearly; little Mixed not objected to; cash up to £800. Full particulars received in confidence. J. T. W., Winton Villa, Sudbury, Essex.

WANTED, a compact Retail and Dispensing Business, returning about £1,500; West Midlands preferred; all communications treated with the strictest confidence; references exchanged. Address "West Midlands," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR SALE.

FOR SALE, all good second hand.—12 ft. range pine drawers (46), with cupboard, lockers, shelves, and cornice, 5 ft. 10 in.; 12 ft. range ditto, without shelves, 5 ft.; 10 ft. pine-top counter, 27 drawers, 5 ft.; 8 ft. ditto, 45 in.; 6 ft. dispensing sercen' and counter, 6 ft.; 8 ft. upright counter-case, 4 doors, 4 ft.; 2 ft. case and desk, 30 in.; two 5 gallon carboys, 2 ft.; two 3 gallon ditto, 12 in.; 22 dozen round, syrup, oils, and jars, 9 ft. 14 in.; 3 ft. sloping case, 30 in.; 2 specie jars and stands, 20 in.; 4 ft. French scales and weights, 20 in.; 14 in. marble mortar and pestle 2 ft. R. Tomlinson & Sons, Medical Fitters and Valuers, Bon i Street, Birmingham.

TO LET.

TO CHEMISTS.—Shop to Let, specially suitable for this business; no opposition whatever; main road; good hours; back and private entrance; rent £10. Apply J. F. Stouchew.r, 112 High Street, Wandsworth.

APPRENTICESHIPS.

APPRENTICE wanted; pass d Prelim. exam., or its equivalent; grand opportunity of acquiring a thorough general all-round knowledge of the business; small premium. Apply, Ernest Sivege, Chemist, Hull.

APPRENTICE.—A vacancy occurs in an old-established Business for a well-educated youth as an Apprentice; moderate premium; must have passed the Preliminary examination or its equivalent. Apply to John Ekin, Chemist, 97 High Street, Bedford.

APPRENTICE, a gentlemanly, well-educated Youth, who has passed the Preliminary exam., in a good Retail, Dispensing, and Prescribing business, which furnishes every opportunity for acquiring a thorough knowledge of the profession; outdoors. H. A. Knott, 83 Ashbrook Road, Upper Holloway, N.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A N Assistant, about 25, for general Country business; outdoors A. B. Adams, Mansfield.

SMART Junior, for Mixed Retail and Prescribing; state age, salary, &c. Apply E. Stead, Chemist, Widnes.

A N Assistant, about 25 years of age; qualified preferred. Please apply, personally or by letter, to 675 Holloway Road, Upper Holloway, N.

IMEDIATELY, an energetic Junior (outdoors), and no Sunday duty. Apply, with usual particulars, to F. T. Patman, Whitehaven.

WANTED, qualified Assistant for a Dispensing and Light Retail business. State references and salary required. J. A., 135 Woodhouse Lane, Leeds.

A N Improver for a good class Dispensing business in London. Reply to Thomas D. Robinson, Pharmaceutical Chemist, 5 Campdale Terrace, Tufnell Park, London, N.

A SSISTANT wanted, single, indoors, for a Mixed Country business; good references; no Sunday duty. Apply, stating full particulars, to Saunders, Chemist, H. V. F. Fordwest.

COMPETENT Assistant wanted, for a Pharmacy in Italy. Please state experience, salary required, send copy of testimonials, "Assistant," c/o M. R. & Co., 9 Clerkenwell Road, London.

IMEDIATELY.—Senior Assistant, as Dispenser; qualified, and accustomed to select business. Apply, giving full particulars, Whiston & Co., Chemists, St. James's Square, Bath.

WANTED, a Junior Assistant, for the country; time for study; one with a knowledge of Post-office work preferred. Address M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ENERGETIC Manager, qualified, to live indoors, single, about 30, for Mixed Retail and Prescribing; must be able to extract teeth. Apply, with full particulars, to Gould, Chemist, Harborne, Birmingham.

WANTED, a practical Medical Plaster Maker and Spreader, with some knowledge of Chemistry, either for home factory or America. Address, stating wages required, Leslie & Co., Broad Court House, Wallbrook, E.C.

NEWCASTLE-ON-TYNE.—Wanted, an Assistant of good address; Minor; good salary to competent hand. Apply, with references, stating salary required, and all particulars, to J. H. Lomas, 45 Northumberland Street.

JUNIOR Assistant, for good-class Retail and Dispensing business at Newquay, Cornwall; state age, references, and salary required, with photo (to be retained). Apply in the first instance to J. Vivian Williams, Plymouth.

WANTED in a Light Retail and Dispensing business, a steady and trustworthy Assistant; comfortable home. Apply, with full particulars, enclosing photo if convenient (to be returned), to G. W. Foden, Chemist, Gloucester.

PILL MAKING.—A competent Assistant, to take charge of this department in a Wholesale house. Address, giving particulars of previous experience &c., "Pilla," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM or Assistant (qualified) wanted, by August 11, for three weeks. Aplin, Chemist, Reading.

BRANCH Manager for seaside; single; qualified; good Dispenser and Salesman. Marshall Leigh, 46 Dyke Road, Brighton.

JUNIOR Assistant wanted for good Country business; two kept. Send usual particulars to J. Phillips & Son, Pharmaceutical Chemists, Newport, Mon.

ASSISTANT wanted; single; outdoors; must have good references. State full particulars, age, height, and salary required, Markham & Co., Market Place, Darlington.

CHEMISTS'. Junior Assistant wanted; time for study; if able to command £2.00 might lead to partnership. X., care of J. Vickers & Co., Cannon Street, Manchester.

DISPENSER, unqualified, in or near London, in September; London experience; easy hours. "Primus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a thoroughly competent and trustworthy Assistant, for a Light Retail and Dispensing business; indoors; Minor qualification. Particulars, with carte, to J. Brown, 24 Sheep Street, Rugby.

IMEDIATELY, a Branch Manager; salary £10 per annum; with rooms and attendance; easy hours. Apply, with full particulars as to age and experience, to T. Davies, Pharmaceutical Chemist, Port, Glam.

LOCUM TENENS wanted for about 3 weeks, from August 15th; must be qualified and reliable. Apply, with full particulars, including terms (indors), with references, to R. Mumford, Chemist, Splotland, Cardiff.

TWO Assistants, one qualified, in good-class Dispensing business. Apply, with full particulars, enclosing, if possible, photo (to be returned) to Frost & Harrisou, Pharmaceutical Chemists, 2 Etham Road, Lea, S.E.

WANTED, an energetic Assistant, aged 20 to 22; indoors; Family and Dispensing trade; no heavy. Apply to Owles & Son, Pharmaceutical Chemists, 9 Hale Quay, Great Yarmouth, enclosing c.d.v. (to be returned).

QUALIFIED Assistant wanted as senior; salary about £120 (outdoors); must be of energetic habits, and used to quick trade. Apply, stating full particulars, to Parke, Chemist, Brixton, S.W. Wanted also, a junior.

WHOLESALE.—Junior Assistant wanted for Wet Counter; must know the business thoroughly, and be well recommended. Apply, stating age, experience, and salary required, to John Mackay & Co., Canongate Street, Edinburgh.

WANTED, an Assistant for the Wet Counter; competent to make the various chemical preparations in the laboratory. State experience, and length of time in last situation, salary required, &c. Slinger & Son, Wholesale Druggists, York.

WANTED, an indoor Assistant, accustomed to good-class trade. State age, height, salary required, how long in last situation, also enclose carte, which will be returned; hours of business moderate. Morgan, Chemist, Southend-on-Sea.

DISPENSER (qualified) required at the Haymarket Stores; hours 9 to 7, Saturdays 2.30; outdoors. Apply by letter only, stating salary and all particulars, to "The Chemist," Civil Service Co-operative Society, 23 Haymarket, London, S.W.

END of August; a smart Junior, of good appearance and address; comfortable home, no heavy trade. Apply personally, or send carte, with particulars as to experience, salary, &c., Harold Mitchell, The Merton Pharmacy, South Wimbledon.

INVOICE Clerk wanted immediately for the wholesale; superior handwriting and good general qualifications for office duties indispensable. Apply by letter, enclosing specimen invoice, T. Howard Lloyd & Co., Wholesale Druggists, Leicester.

TWO Juniors, at once; outdoors; branch, Kilburn, N.W.; must be quick and reliable. Apply, stating experience, salary expected, &c., to Lewis' Drug Store, 22 & 24 Gt. Portland Street, W. Also vacancy for Clerk and Stockkeeper, indoors.

CARSIDGE & SON, Ormskirk, have a vacancy for a Qualified Assistant; unmarried; to lodge on the premises; must be thoroughly trustworthy and competent; Mixed country business; easy hours; weekly half-holiday; give full particulars.

INDOORS.—Wanted, immediately, an experienced Assistant, who understands Dispensing and the ordinary routine of a good Country business; no Sunday duty; a churchman preferred. Apply, R. M. Pratt, Chemist, Manor Square, Otley, Yorkshire.

WANTED, the last week in August, a qualified outdoor Assistant, accustomed to good-class Retail and Dispensing, &c.; competent to take sole charge of a suburban business on salary and commission. Address, W. J. S., care of Messrs. Barron, Harvey & Co., Giltspur Street.

WANTED, an energetic Assistant (sole); qualified; indoors; gentlemanly and trustworthy; no Sunday duty. Apply (with carte if possible), stating age, height, experience, salary required, and references, to "Celaudine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

WANTED, for the country, middle of August, qualified young man or woman; salary £90 to £100; must be a careful Dispenser, obliging and of good address; also unqualified with good experience. Address, with copies of testimonials, &c., to James Taylor, 132 Trongate Street, Glasgow.

A COMPETENT qualified Assistant, about 25 years of age; one accustomed to first-class Family and Dispensing business; hours 8.30 to 2; Saturdays to 10 o'clock; no Sunday duty; Wednesday half-holiday; salary £60 (indoors). Photo, with full particulars, Wood, Chemist Macclesfield.

BIRMINGHAM.—Wanted, an Assistant of good address; must be an accurate Dispenser and possess the Minor qualification. Apply, stating particulars as to age, experience, and salary required, to T. & W. & W. Southall, 17 Bull Street.

IN the North of London, third week in August, an indoor Assistant, age about 24, of good character and sober habits; one accustomed to a Prescribing business preferred. Apply, stating full particulars, to W. A., c/o Messrs. Herring & Co., 40 Aldersgate Street, E.C.

TEMPORARY Assistant wanted for the country; one having just passed his Minor preferred; good salary given, and a permanency if desired. Apply, stating age and height, reference, &c., to "Satim," Barron, Harvey & Co., Giltpur Street, London.

ASSISTANT; Minor qualification; indoors; about 22 or 23; accustomed to a good Retail and Dispensing business. Apply, stating age, height, salary, experience, &c., enclosing photo, to John Rae, High Street, Newmarket. Letters not answered in 3 days declined.

WANTED at once, for 2 or 3 months, an Assistant, aged from 25 to 30, capable of taking entire charge, if required, of General Retail and Dispensing business; able to extract teeth; abstainer. Apply, with carte, reference, and salary required (indors), 40 King Street, Plymouth.

INDOORS.—A qualified man as Manager of Country branch in North Wales; not under 25; active, pushing, and with character bearing the strictest investigation; a knowledge of Welsh is desirable, but not essential. Apply, with full particulars, to "Permanency," c/o Evans, Sons & Co., Liverpool.

WANTED, an Assistant for Light Retail and Dispensing business, W.; one just completed his time in a good house of business treated with; a remunerative and comfortable situation offered to suitable gentleman. Address, M. P. S., Messrs. Hogkinson, Prestou & King, 81 Bishops-gate Street Without.

A QUALIFIED Assistant, indoors, not under 23, in a Light Retail and Dispensing business; must be quick, and have a good knowledge of the business; state experience, height, age, and salary required; progressive salary to a good man seeking a permanency. Elliott, 193 Uxbridge Road, Shepherd's Bush, London, W.

JUNIOR.—Wanted, at once, steady, trustworthy, and pushing Junior; indoors; able to Extract Teeth and accustomed to Agricultural Retail preferred; healthy district; comfortable home; Wesleyan family. Please enclose reference and photo, and state age and salary required, T. Lockwood, A.P.S. Chemist, Oteley, Yorks.

YOUNG gentleman (qualified preferred, but not essential) for good-class cash Retail and Dispensing business, near London; salary £35 (indors); hours 8.30 to 9; no Sunday duty, one evening weekly, also some spare time allowed. Send photo, age, height, references, to "Beta," 32 Rectory Road, Stoke Newington, N.

AT once, Assistant (indors), aged 20 or 21, for general Retail; abstainer; no liberty one evening weekly; hours 8 till 10, and alternate Sunday evenings; no special time for study; salary £30 or £35. Apply personally, or with carte, enclosing reference, &c., to Mr. Taplin, 91 Hampstead Road, London, N.W.

BRIGHTON.—A competent and trustworthy Assistant, accustomed to good-class Retail and Dispensing business; abstainer; about 22; member of a Christian Church preferred; a weekly half holiday given. Address, with full particulars, age, height, salary, and reference, with photo, Mr. Vizer, 154 Marine Parade, Brighton.

WANTED, a fully competent Bookkeeper, to proceed to South Africa within a month from date; must be steady, in good health, and not over thirty years of age; three years' engagement, with good and rising salary; pass age paid. Apply, by letter, enclosing references, to 28/2 Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NEAR GREENWICH.—Wanted, Assistant; good Chemist and Medical Boar'd, who can make business. Prescribe, Dispense, get up saleable Medicinal and other specialities, gradually improve shop, and take a large if required; salary £25s. and half share of profits over £3s.; £1.00 to back if required; from £5 to £10 a week should be earned by said Assistant. 193/8, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WORCESTER Dispensary and Provident Medical Institution.—Wanted, immediately, an Assistant Dispenser; must be an Associate of the Pharmaceutical Society; salary £70 per annum (non-resident). Application, stating age and full particulars as to experience, with copies of recent testimonials, to be sent to the undersigned, on or before Thursday, the 6th inst. Frank Everill, Secretary, 59 Forgate Street, Worcester.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

LOCUM; day, week, or month. "Minor," 3 Effie Road, Walham Green, S.W.

DISPENSER or Senior; outdoors preferred. J. H., 46 Kingsholm Villas, Gloucester.

ASSISTANT; qualified; aged 23; good references. "Minor," Dursley, Gloucestershire.

LOCUM-TENENS; Major; disengaged August 17. G. Smith, Mr. Garland, Chemist, Cannock.

TEMPORARY; permanency; Minor, full; aged 33. T., 11 East Terrace, Fairlawn Park, Sydenham.

LOCUM-TENENS, or Branch Manager, Family or Mixed business P.D.S. 17 Trinity Street, Nottingham.

BRANCH Manager, country; disengaged; aged 33; Extractor. "Prescriber," 44 Liver Road, Fulham.

AS Junior; town or country; qualified; aged 23; highest references. "Alpha," 8 Shepherd's Bush Green, W.

ASSISTANT; vivid experience; in or outdoors; steady; disengaged. T.ist, Chemist, Pinner, London.

BRANCH Manager; experienced Prescriber and Extractor; registered, Walker, 4 Broad Street, Pendleton.

ASSISTANT; London preferred; aged 23; good experience; height 5 ft. 8 in. T. C., 67 Oxford Street, Swansea.

EVENING employment, by qualified Chemist; disengaged 6 o'clock. "Veritas," 3 Woburn Place, Russell Square, W.

MANAGER in absence of Principal, or for Widow; qualified; long experience. "Chemi-t," 8 Church Street, Salisbury.

ASSISTANT; accustomed to good-class business; Major; aged 21 $\frac{1}{2}$; height 5 ft. 8 in.; disengaged. Shakspur, Syston, Leicester.

MANCHESTER or neighbourhood; Assistant or Dispenser; outdoors. "Minor," 99 Great Cloves Street, Broughton, Manchester.

SOUTH AFRICA.—As Manager or Senior; 17 years' experience; married; aged 32. "Minor," 55 Wycliffe Road, Lavender Hill, S.W.

AS Assistant; height 5 feet 7 inches; 12 years' experience; moderate salary. K. L., Field House, Manordeilo, near Llandilo, South Wales.

MEDICAL.—Care of Surgeon's Retail in London, or Dispenser; outdoors preferred; experienced; 14 years' reference. T., 42 Cannon Street.

A FEW hours' employment daily desired in Sheffield, for 3 months. Write, "Dispenser," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT or Branch Manager; qualified; aged 23; height 5 ft. 7 $\frac{1}{2}$ in.; London experience. R. A., Smeaton House, Holyrood Terrace, Plymouth.

ASSISTANT, or with view to succession when qualified; aged 28; married; long experience; undeniable references; every inquiry solicited; North preferred. Cocks, Green Road, Southsea.

TRAVELLER desires re-engagement; connection, Eastern Counties of Midlands, South Coast, with Chemists, Mineral-water Makers, Manufacturing confectioners, &c. X., 10 Stacey Road, Forest Gate, E.

LOCUM; qualified; London or provinces; about a fortnight from August 21; excellent character; references; 13 years' dispensing and retail experience. "Hinde," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ADVERTISER with 13 years' experience as Chemist's Assistant, Surgeon's Dispenser, and Foreman in wholesale proprietary trade, seeks situation; outdoors; exceptional references. Welsford, Lynton House, Liverpool, Lancs, Ramsgate.

AS Branch Manager or Assistant, in good-class business; 13 years' good experience and first-class references; good Prescriber, Dispenser, and Tooth Extractor; married; aged 23; height 5 ft. 9 $\frac{1}{2}$ in. J. M. Taylor, Royston Hill, Hoyland Nether, Barnsley.

WANTED, engagement as Manager, Locum-tenens, or Assistant; a safe business preferred; qualified, experienced, good Prescriber and Extractor; would purchase a suitable business. Address, 270/6, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

COMPLETE Fixtures for small Chemist's shop, with hoppers, &c., bottles not to exceed thirty ounces down to six. State full particulars, lowest price, to "Fixtures," 128 Clifton Street, Cardiff.

KOLA.—A consignment of prime Kola Nut will arrive in a few days of which about 3,000 lbs. weight is offered to private purchasers. For prices and samples, apply to Armorecht, Nelson & Co., 2 Duke Street, Grosvenor Square, London, W.

FIVE POUNDS PREMIUM given for information (if acted upon), for name of town (full particulars, at present without one) where Drug Store may be opened, or Chemist's Business for sale, that can be converted into same; strict confidence. "Verax," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ADVERTISEMENTS FOR ALMANACS, &c.

ALL CHEMISTS and others publishing Almanacs, Price Lists, &c., are requested to send specimen copy, and state number issued and price per page, to L. L. Morse, 10, 11 and 12 Regent Street, Swindon, Wilts, Proprietor of Morse's Herbal Ointment and Pills.

AFIRM, with first-class references, whose Travellers have visited for some years past the whole of Germany, keeping stock in the principal places, and sending price lists to all Druggists and Drysailers in Germany several times a year, wishes to undertake the exclusive Sale of suitable Articles for Germany. Please address, K. V. 558, c/o Haasenstein & Vogler, a-G, Cologne, Germany.

LONDON AND LANCASHIRE FIRE INSURANCE COMPANY.

Head Offices { 45 DALE STREET, LIVERPOOL.
74 KING WILLIAM STREET, LONDON.

Annual Income, £702,000.
Funds in Hand, £807,000.

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

mouth, with a floating population of the weak and dying, are a stimulus to pharmaceutical skill, for the medicine of invalids has to be made as tempting as their food. Hence invalid pharmacy is the equivalent of elegant pharmacy, and there was good evidence of that in all the preparations which Bournemouth pharmacists contributed to the museum. We have reported on the museum with exceptional fulness. There is a purpose in that: the exhibition has been well inspected by most of the medical men who attended the meeting. It is to be expected that what they have seen and heard will temper their prescribing for some time to come, and we give as concisely as possible particulars regarding the more important articles exhibited. The value of these exhibitions is an exceedingly uncertain quantity. Many of those who participate in them state that they get no immediate benefit from them, but all believe they are an excellent means of getting into touch with prescribers. In the United States they have been developed to an alarming extent. Each State medical association meeting, each county one, and each national one, has its exhibition of pharmaceutical products, and some firms keep an exhibition staff doing nothing else than going from one place to another. This will never be possible in our small country, but we noticed in the Bournemouth exhibition a more prominent display than before of secret specialities. We refer to compounds of which the constituents are not revealed. There is a wide gulf between them and compounds of known composition (so far as the active principles are concerned), which are specialities in the purely pharmaceutical sense. The former favour the growth of blind therapeutics, and that is of the highest detriment to medicine.

The address of Dr. Thomson, president of the Association, was a happily-conceived eulogy of the town in which he has so long practised. He indicated the nature of the diseases for which the climate of Bournemouth is beneficial, pointing out also that for those throat affections which require a moist atmosphere it is not well suited. But the more generally interesting portion of the address was that in which Dr. Thomson urged that the appointment of medical officers of health should be made compulsory upon county councils. The obligatory conditions laid down in the Local Government Act have been neglected by the councils, with a few exceptions; and there is no question that this is a regrettable circumstance. With a population growing in density with the years, the conditions for the spread of infectious diseases become more and more favourable, and it is necessary that the sanitary officers of the local authorities should be under the direction of medical officers who are skilled in sanitary science and the practice of chemistry. The few officers who have been appointed have given ample evidence of their worth, and the facts which they are accumulating regarding water supplies, the disposal of sewage, and the housing of the poor will, at the proper time, be of national benefit. Dr. Thomson's address, and the approaching International Congress of Hygiene, may have the effect of riveting public attention to the weaknesses of our hygienic arrangements. It will be long before we touch Dr. Ward Richardson's imaginary Hygiea, but we ought to take some steps, at least, to get ourselves on the highway to that dreamland city.

THE "WORLD'S COLUMBIAN EXPOSITION."

THE arrival in London of four commissioners from the United States, who have crossed the seas with the object of urging us to participate in what, in plain English, we prefer

to continue to designate as the International Exhibition of Chicago, has caused the British public to increase to some extent the measure of attention which it had previously bestowed upon that gigantic scheme. The four commissioners, chief among whom is a man reputed to possess to an unusual extent that persuasive power of speech which characterises the well-bred American, have spent the first week of their sojourn upon British ground in interviews—where conviviality has been deftly blended with business—with some of our most eminent corporate bodies and public functionaries. They have been presented to the Prime Minister and the Secretary of State for India; they have held a solemn palaver with the heads of the mighty London Chamber of Commerce; they have been breakfasted by the Society of Arts—of which the Council were lately metamorphosed *en bloc* into an Exhibition Committee, with a Government blessing and a cheque of 5,000*l.* for expenses; and there is some reason for believing that it is in contemplation to extend unto these delegates the crowning honour of a Guildhall banquet under the auspices of the great lion-hunters Savory and Harris.

So far, then, everything is for the best in the best of worlds. Officialdom has promised its aid to secure that the British court at Chicago—the words sound strangely like an inverted title of Mark Twain's latest book)—shall worthily represent our position as an industrial and commercial nation. But does Officialdom know—or, if it knows, does it accurately reflect—the views of the great majority of our manufacturers and traders? We doubt it, and we take leave to express our opinion that, when once the delegates are brought into plain and unvarnished personal contact with the men without whose help the promises of all officialdom in England cannot avail one iota, Mr. Benjamin Butterworth and his coadjutors will discover that the eloquence of Chrysostomus, the golden-tongued, will not suffice to convince the Birmingham hardware-makers, the Lancashire and Yorkshire spinners and weavers, the Welsh tinplate-makers, or the Tyne chemical-manufacturers, that they have anything to gain in sending their goods to a country where a Customs duty of 60 to 80 per cent. is considered the merest trifle, and where every other platform echoes with ignorant jeers at the "pauper wages" and the "serf-labour" of Europe.

It may be argued that France is becoming almost as protectionist as America, and that yet the foreign element among the exhibits at the Paris Exhibition of 1889 was conspicuously large. It is, indeed, a fact that the number of foreign exhibitors in Paris was considerable, though the proportion, by reason of the scattered nature of the foreign exhibits, seemed greater than it was; but a very large percentage of the non-French manufacturers who sent their goods to Paris did so with a view to bring them under the notice of foreigners rather than of Frenchmen—of the buyers from Australia, India, the Far East, South and Central America, Spain, and the Levant, who in their thousands would flock to the "Ville lumière," and visit its wondrous Fair. And could it be seriously contended that the influx of such customers into a remote American inland city, without historic associations of any description, with no other grandeur than the cubic area of its hog-slaughtering and kindred establishments, and devoid of all those attractions which have made Paris the Mecca of the pleasure-seeker, can possibly equal that which rendered the Paris Exhibition valuable from an advertising standpoint? Moreover, the French tariff, though high, cannot be compared to the American, and France has, at any rate, had sufficient sense of the fitness of things to select the year following, instead of the year preceding, her festival of

Liberty, Fraternity, and Equality to declare commercial war against the world.

The foreign visitors to Chicago, not counting Britishers and other Europeans, to cater for whose custom our manufacturers need not go as far as Illinois, will be chiefly well-to-do citizens of the Central and South American Republics. Mexicans and Brazilians will, no doubt, flock to the Columbian Exposition, and so, if any remain alive, will Chilians, Guatemalans, and the rest. Unfortunately, the Latin-American States, with one or two exceptions, are commercially at a serious discount just now, and it is scarcely in their territories that our traders care to search for new custom at present. Besides, the commercial policy of the United States has lately been shaped specially with a view to obtain control of the South American markets by reducing its tariff on their raw produce in return for preferential rates for American manufactures.

We do not feel constrained to make these observations because we wish ill to the Chicago Exhibition. On the contrary, we desire that it may be as gigantic a success as its most enthusiastic supporters dare hope. We have no wish whatever to deter British manufacturers from participating as exhibitors in the Fair. We should like to see this country worthily represented, but we fear that it will be impossible to persuade our manufacturers that they will consult their interests if they appear at Chicago in any function other than that of spectators; and we are anxious that the American delegates should have this truth plainly laid before them.

We adhere to our often-expressed view that the ultimate result of recent American tariff legislation will not be injurious to British trade. But to enact laws one year for the express purpose of preventing our goods from being sold in the United States, and the very next to invite us politely to show the Americans what we can do in commerce and manufactures, appears to us a proceeding attributable only to an inordinate lack of the sense of humour, or to an equally abnormal development of the characteristic known as "assurance." Our transatlantic friends have never been accused of the former foible.

NEW METHYLATED SPIRITS.

THE Inland Revenue Department has issued a general order regarding the composition and sale of methylated spirits, which is of great importance to all retailers of the spirits. On and after September 1 of the present year no methylator is to be allowed to supply to any retailer of methylated spirits the simple mixture of spirits and wood naphtha which goes by that name at present, but it must contain, in addition, a minimum of 0.375 per cent. by volume of mineral naphtha not less than sp. gr. 0.800. This naphtha is the nasty-smelling fluid which is burnt by costermongers, and the object of adding it to the spirits is to provide a fluid which will make a milky mixture with water and be more repulsive as a beverage than the present methylated spirits. The addition of the naphtha does not interfere with the utility of the spirits for burning purposes, and, as all samples to be used for methylation are to be approved by the Board, we trust that nothing will be done which will in any way interfere with the economic use of the spirits. It will be noticed from the order that the new regulation only applies to methylated spirits which are to be sold by retail. It is, in fact, the department's effort to put down the use of the spirits as a beverage in Ireland and Scotland. Further, power is taken in the general order to prevent this malpractice, the addition of essential oils or other flavouring agent to the spirits being prohibited, and, should local circumstances demand it, retailers may be required to keep a

stock book, in which a complete record is to be kept of all spirits placed in stock and the quantities retailed, with full particulars regarding purchasers. These regulations are somewhat stringent, but, so far as chemists are concerned, they are likely to be of benefit in bringing the sale of spirits into the hands of those who have experience in the registration of sales. The regulations do not affect the use of methylated spirits, without mineral naphtha, in manufactures, but although pharmacists may obtain permission from the Board to the use of such spirits for liniments, the third clause of the order will apply very awkwardly. This clause states that:—

A retailer of methylated spirits must not sell or have upon his premises for sale methylated spirits containing any essential oil or other flavouring matter, or in which mineral naphtha has not been dissolved.

The officers will have so much difficulty in distinguishing between what is for sale and what is for use in manufacture, that the regulation will practically amount to prohibition of one or the other. The outcome may be that pharmacists must either make methylated preparations in distinct premises, or purchase them from wholesale dealers.

IS INFLUENZA INFECTIOUS?

No one questions that influenza is a disease which becomes epidemic, but that does not necessarily mean that it is infectious. Nor does the fact that the British Parliament scatter thiocamp without stint in its committee-rooms, and burn therein sulphur candles galore, prove that it is microbic. When it came upon us at the end of 1889 all sorts of causes were discovered for it. Generally speaking, the atmospheric theory found most favour. The eruption of Krakatoa, the alluvial mud-dust from Hoang-ho, the abnormally mild and moist winter, the presence of exceptional quantities of ozone in the air—these, and several other conditions alleged to have occasioned the disease, yielded theories which found more or less favour, and one was as likely to be right as another. It was enough for medical men to battle with the disease while it was epidemic; and it is only since the worst of it was over that an attempt could be made to estimate the value of the various suggestions. Dr. Parsons has done this admirably in his report to the Local Government Board, to which we referred generally a fortnight since; and, although he has not clearly proved the cause, he conclusively shows what may not be so reckoned. It is obvious that, if a poison of any kind, apart from microbic, existed in the atmosphere capable of producing influenza, it would be waste of time to seek for proof of its infectious character. Were the causation atmospheric, we should expect outdoor-workers, such as seafaring men and farm-labourers, to be affected as quickly as, and probably more quickly than, dwellers in towns, and that the disease would travel with the wind. The conditions prevailing during the epidemic were exactly opposed to this. In the first place, the disease came to us from the east, travelling westward, while the winds which prevailed were mostly from the west. For instance, the epidemic was general in January, on the second day of which the wind was east, but on the fourth it was south, on the fifth south-west, and so it continued until the end of the month, when we had two days of north north-east. From this it is evident that, during the worst of the epidemic, the wind came from an exactly opposite direction to that from which the disease was supposed to come. In short, the influenza travelled in the face of the wind, which circumstance alone disproves the supposition that it is atmospheric. Its incidence also disposes of the theory. The best proof of this in Dr. Parsons's report is furnished by the statistics supplied by Trinity House regarding the

dwellers in seventy-nine lighthouses and lightships. Between 300 and 400 individuals are included in this calculation, and only seven of these had influenza, and in all those seven cases recent communication with the mainland could be traced. Where there was no communication there was no influenza. Seafaring men and farm-labourers also escaped until they got in touch with infected districts. The experience of the railway companies was that their outdoor servants were less liable to attack than the clerks. The London and North-Western had 4.7 per cent. of its drivers and firemen attacked and 11.5 per cent. of the clerks. These facts are an additional proof that some peculiar constituent of the atmosphere has nothing to do with the epidemic. Dr. Parsons states that the strongest piece of evidence in favour of the atmospheric origin of influenza is furnished by Dr. J. C. Thresh, who, in a report dealing with the outbreak of an epidemic in the isolated and thinly-populated district between the rivers Blackwater and Crouch, states that "it is difficult to conceive how infection from person to person should cause so rapid a spread of the epidemic." Upon this and similar cases, Dr. Parsons remarks that "the commencement of cases at about the same time in different parts of a district may be explicable by infection contracted when attending market on a particular day of the week or divine worship on Sunday. Thus, in two districts—Llanfyllin and Devizes—a number of persons in different parts of the parish, taken ill within a day or two of each other, were found to have been at church the Sunday before, on an occasion when there was reason to believe infection to have been present." The same applies to Dr. Thresh's district. The first cases occurred on January 5—a Sunday—and there was a large increase on the 13th—a Monday. The preacher has something to do with it too. We have in mind a church in the North of London, where the congregation had been remarkably free during the recent epidemic. One Sunday, however, a popular preacher appeared in the pulpit, and attracted hearers from all points of the compass. That week a large number of the resident members of the congregation were attacked, and the church has not been free from it since.

The Hoang-ho mud theory is disproved by the fact that the mud has been found to be "unmitigated sand, which for years has refused to grow any crops whatever," and influenza did not appear in that country until February, 1890, coming through the treaty ports. Nor is the ozone theory tenable. Ozone has been known since Schönbein's time to produce symptoms not unlike influenza. This led some people to say that the influenza epidemic was ozonic; but there was never much ozone in the air while the epidemic lasted. On no day from December, 1889, to February, 1890, did it reach 6 degrees, while it often goes above 10 degrees when there is no influenza. Against all supposition of meteorological influence we have to place the facts that (1) the spread of the disease from town to town, and district to district, has generally been traced to infected persons travelling from one to the other. Dr. Parsons's report contains many examples of this, but instances will occur to our readers, so that we need not quote examples; (2) the individuals of households have in most cases all suffered; (3) persons liable to come in contact with infection were attacked first—as in London, where it has very commonly been observed that the first cases were all among men who went to town on business every day, their wives and families being next attacked, and the locally-employed population of tradesmen and artisans later still; (4) persons living in circumstances under which the possibility of infection was excluded generally escaped influenza. This is shown by the cases of the lighthouse-keepers, the immunity of fishermen, and many in

stances on land, even where isolated colonies of individuals having little communication with the outside world escaped altogether, or were only attacked late in the epidemic. All these circumstances are strong evidence that influenza is infectious or contagious in the sense that scarlet-fever is contagious, and it is most likely that it is of microbic origin. It is true that no specific micro-organism has been discovered as associated with it; but the nature of the disease, especially the pyrexia, or prostration, are symptomatic of such a cause. Only by this assumption can we account for the contagion being carried by individuals from town to town and from country to country. There is ample evidence that the disease did not spread faster than individuals can travel. A curious feature about the study is that the "pink-eye," or influenza, of horses prevailed while the exactly identical disease was afflicting man, and it is probable, although the evidence is incomplete, that the diseases, if they are two, are intercommunicable. Dr. Parsons, in his report, touches upon the epidemic of the present year, during which, in some places, horses were affected before men. When we consider the course which the disease runs, and that fatal results are only due to secondary symptoms, such as pneumonia and bronchitis, it is questionable if we shall ever discover the microbe of influenza. Nor do we think that the disease can ever be ranked with others of a contagious nature. It may be possible, in the case of schools, to place infected children in quarantine, but to do the same thing to the breadwinners—who, it appears, are the first cause of the mischief—would not be tolerated.

COMMENTARY.

THE ALLEGED DEATHS FROM CHLOROFORM AT MANCHESTER.—Subsequent to the coroner's inquests held at Manchester on the last Friday of June, regarding the deaths of two patients who had been operated upon surgically, the medical board of the Manchester infirmary appointed a sub-committee to investigate the whole matter of the use of chloroform in the infirmary, with special reference to Warrington chloroform. They have now issued the following report:—

1. That of the five deaths referred to by the coroner at the recent inquest two only were due to the direct effects of the anaesthetic, and that of the other three, two were due to vomited matter getting into the larynx and producing suffocation, and one to collapse suddenly supervening after the operation had been concluded and the patient had nearly recovered from the effects of the anaesthetic.

2. We have been informed by Mr. Alexander Wilson, the anaesthetist, that he has used the chloroform in question about 800 times, and had observed nothing unusual in the behaviour of the patients either during or after its administration.

3. We have learned, also, that the chloroform is largely used in other hospitals, and that no difference has been observed between it and others.

4. A report on the quality of the chloroform by Professor Attfield was laid before us, in which it is stated that "it possesses all the characters and responds to all the tests of pure chloroform of the British Pharmacopœia; and, in short, is perfectly pure chloroform." He also certifies that it is "of excellent quality for anaesthetic purposes."

5. Under these circumstances we are satisfied that the chloroform in question is a good and reliable article, that the deaths were not attributable to any peculiarity belonging to it, but would probably have equally occurred under the use of chloroform manufactured by any other process, and we further see no reason why the use of this chloroform should not be continued in the Infirmary.

This report entirely corroborates our statement (THE CHEMIST AND DRUGGIST, July 4, p. 18) that the deaths in June were not due to chloroform.

THE AMERICAN QUININE MAN IS SHOCKED.—Our recent editorial comments upon the quinine combination negotiations have attracted considerable attention in American

pharmaceutical circles. The *New York Shipping and Commercial List* makes itself the champion of the American gentleman who conducted the negotiations in Europe on behalf of his countrymen, and whose voice may easily be imagined to have guided the hand of the editor of our contemporary. The American quinine man is very wroth with his German colleagues, and observes that the revelations will not redound to their credit. "The American representatives," he unctuously remarks, "who participated in the negotiations acted the part of honourable gentlemen in refusing to talk on the subject after their return. No amount of questioning could influence them to say a word of what transpired, and they still maintain a strict silence. Two other delegates, however, through a desire for cheap notoriety probably, give publicity to matters which were considered confidential from being discussed at private meetings of the quinine manufacturers. The principle of divulging secrets should be condemned. When a man is taken into the confidence of others, with the understanding that what he hears is not to be discussed outside, he should hold sacred every word and action until given permission to do otherwise." Such are maxims of our solemn visitor, and we admire them the more because of the evident difficulty with which he carried about the weight of the portentous secrets with which his mind was charged. It used to be said that no man could possibly be so wise as Lord Chancellor Thurlow looked. The same epigram might have been applied to our American friend.

THE BRITISH ASSOCIATION.—A considerable amount of local colouring is to be imparted to the meeting of this Association at Cardiff this month. Professor Huggins, the president, will it is understood confine his address to the subject which has been the work of his life, namely, the spectroscopic researches in celestial bodies. In the chemistry section Professor Roberts-Austen, chemist to the Mint, is expected to devote the greater portion of his address to metallurgical questions. His aim will be to show that if the metallurgic art has promoted the advancement of science, it has received splendid gifts from science in return. He will deal at some length with the influence of the labours of investigators in pure science on the progress of metallurgy, and he will point to the national importance of fostering it by careful teaching. Professor Austen has himself been working energetically to render the Cardiff meeting a memorable one in B, and he seems likely to prove successful. There will be a discussion of explosions in mines taken part in by Sir F. Abel, Messrs. Parry, Galloway, H. Dixon, V. Lewes, and other specialists. The subject of alloys will also be discussed and metallurgy generally. There will be a paper on rare metals by Professor C. M. Thompson, of Cardiff, and another by D. Ludwig Mond, on compounds of carbonic oxide with metals. There will thus be a large amount of metallic and mining chemistry in this section and very little organic chemistry.

PRESCRIBERS AND DISPENSERS.—Last Sunday's *Umpire* contains another of those special articles with which it occasionally startles its readers. The heading, to begin with, is alarming, being: "Drugs and Death. The Risks we run at the hands of Medicine Men. Haphazard Dispensing. Throw Dog-Latin to the Dogs." The special commissioner of the paper visited a number of chemists and consulted with several doctors regarding mistakes which occasionally occur in dispensing medicines, and, although attributing some of the blame to chemists, the inquiry showed that the bad writing of prescribers is, to a large extent, responsible for many errors. Two autograph prescriptions are given, one of these being Dr. Hasting's pre-

scription, given on page 244 of the "Art of Dispensing." The writer says of this that he has submitted it to three different qualified men, and, as a consequence, he had three various readings of it. He was not astonished, seeing the peculiarities of the caligraphy. But, on the whole, there is very little new in the article, most of it consisting of the stock anecdotes regarding mistakes with acid hydroc. and the like. The conclusion which the writer comes to is that all prescriptions ought to be written out in English, without abbreviation, and in a distinct hand. On this point he says that most English homœopaths long ago discarded the use of the Latin language in their prescriptions, chiefly on the ground of liability to error on the part of the dispenser; and one of the highest authorities on the subject—himself an allopathist—writes: "The average caligraphy of the homœopathic prescriber is *above* that of their allopathic rivals, and directions are always written in English." The result of the inquiries into the subject convinces the writer that, putting aside altogether the rival claims of allopathy and homœopathy, far fewer mistakes are made in dispensing prescriptions written in English than those written in Latin.

Gazette.

PARTNERSHIPS DISSOLVED

Dixon, H. B., & F. Beech, under the style of Dixon Brothers, Hanley, wholesale druggists and drysalters; as far as regards F. Beech.

Green & Kidson, Birmingham, commission agents, spice, seed, and drug merchants.

Lunger, C. R., & Herrick, S. W., under the style of the Koko Maicopas Company, Prince Teck Buildings, Earl's Court, and Regent Street, and New York.

Saunders, T., Saunders, A., & Ellison, H., under the style of Saunders & Co., Cleckheaton, manufacturers of chloride of ammonia.

Stead, Joseph, & Stead, John J., under the style of A. Stead & Sons, Heckmondwike, drysalters and dyewood cutters.

THE BANKRUPTCY ACTS, 1883 AND 1890.

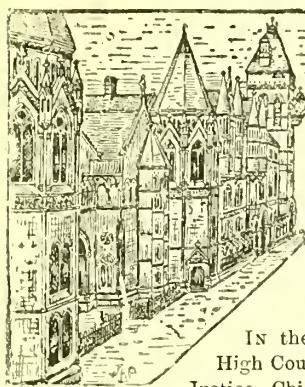
RECEIVING ORDERS.

Morris, Henry Ridley, Sudbury, chemist and druggist.
Scott, Samuel Swift, Mansfield, chemist and druggist.

ADJUDICATIONS.

Morris, Henry Ridley, Sudbury, chemist and druggist.
Scott, Samuel Swift, Mansfield, chemist and druggist.

BOVRIL (LIMITED).—The third ordinary general meeting of Bovril (Limited) was held at the Company's Warehouse Offices, Bath Street, City Road, on Thursday, Mr. J. L. Johnston (chairman) presiding. The report stated that the gross profits amounted to £6,653*l.*, but a very large apportionment of depreciation fell upon the present year—no less than £4,677*l.*. The directors recommended a dividend at the rate of 5 per cent. This would leave a balance of £2,857*l.* to be carried forward and the reserve fund intact. In moving the adoption of the report the chairman said that the past year was a disappointment. In the manufacture of their specialties they required very large quantities of albumen, fibre, and extract of meat. The fibre they manufactured themselves in America, but the extract of meat they required far in excess of its production. One contractor discontinued supplying them altogether, another delayed supplies to a very great extent, whilst from South America they received a cable that it was impossible to send the particular commodity required till next season. The directors, believing a "corner" was being organised to their disadvantage, very wisely decided to pay the higher prices asked. To work upon a small profit was a temporary misfortune. It was agreed that they should not again be without three months' supplies of materials in hand. After a brief and agreeable discussion the report was adopted.



IN the Chancery Division of the High Court on Wednesday, before Mr. Justice Chitty, Mr. Cutler moved, on behalf of Mr. G. A. Phillips, trading as "David Thorn & Co.", of Manchester, Birmingham, Bradford, and Nottingham, soap manufacturers, for leave, under section 92 of the Act of 1883, to remove the words "trade-mark" from two registered trade marks, Nos. 15,792 and 15,793.

The Attorney-General (Sir R. Webster) appeared on behalf of the Comptroller-General in opposition to the motion.

Mr. Cutler said the ground of the application was the fear that some ingenious person might hereafter suggest that the decision of the Court of Appeal in the Apollinaris case referred to the present case, and that the applicant was not entitled to any protection because the labels were deceptive in having the words "trade-mark" upon them. If these labels were misleading, they were misleading only to persons who looked at them for the purpose of seeing how much of the trade-mark they could with impunity copy or adopt. The trade-mark had been used for a great number of years; the applicant had never brought an action for infringement, and, presumably, no one had attempted or wished to copy the trade-marks. Under these circumstances, he submitted Mr. Phillips was justified in the removal of the words "trade-mark."

The Attorney-General argued that this was not a case in which the alteration sought for should be allowed. The trade-marks were old ones, and it would create a dangerous precedent to cut out of them words which had their meaning and their function, and which, he suggested, could do harm to no one.

Judgment was reserved.

HUNYADI WATER.

LAST Friday Mr. Justice Sterling had before him an application by La Compagnie Générale d'Eaux Minérales et de Bains de Mer, carrying on business at 3 Rue Rossini, Paris, to set aside the service of an originating notice of motion lodged with them on behalf of Emily Saxlehner, of 3 Andrassy Street, Budapest, Hungary, widow, on the ground that the said company had no place of business in the United Kingdom, and that no leave had been asked or obtained, or, if asked, could have been obtained, under the provisions of certain specified Acts, or the orders or rules of court thereunder, for the service of the said originating notice of motion upon the said company out of the jurisdiction. The action was of importance mainly with reference to the service of notice of proceedings in the English courts upon foreigners residing out of the jurisdiction. The applicants are a Société Anonyme, established according to the French law, having its head office and place of business in Paris, and having no place of business nor any premises of any kind in the United Kingdom. They are proprietors of certain springs of mineral water in Hungary and elsewhere, and had registered certain trade-marks in this country in respect of mineral waters and other preparations sold by them. The notice of motion, the service of which it was the object of the present application to set aside, was a notice of motion to expunge these trade-marks from the register. It purported to be served on behalf of Emily Saxlehner, of 3 Andrassy Street, Budapest, Hungary, widow (trading as Andreas Saxlehner). Emily Saxlehner was the administratrix of her deceased husband, Andreas Saxlehner,

who, during his life, had been the owner of the Hunyadi Janos spring in Hungary, in the sale of the waters of which he had carried on a large business. According to the evidence of the secretary of the company, the notice was, on July 2, 1891, served upon the company by being left with him at its office, No. 3 Rue Rossini, and it appeared that no leave had been obtained for the service of such notice out of the jurisdiction. It was contended, on behalf of the company, that such service was quite irregular, and ought to be set aside. On the other hand, it was argued for the respondent to the present application that the service of the notice upon the company was intended simply to inform them of the proceedings, and not to compel them to appear. It was not intended to found any further proceedings upon this notice. If a foreigner chose to put his name on the English register he must be deemed to have submitted to the jurisdiction of the English courts. Mr. Justice Sterling, in giving his decision, discussed the legal bearings of the case at great length, and decided for the applicant company. It seemed to him that the service was intended to be a notice that the jurisdiction of the court was to be invoked against the respondents as if they had been within the jurisdiction. The applicant had no right to serve such a notice without leave, and, moreover, could not have obtained such leave. It was an abuse of the process of the court, and must be set aside accordingly; and his Lordship saw no reason why the costs should not be paid by the person on whose behalf the notice had been served.

Subsequently Mr. Moulton, Q.C., made an *ex parte* application in the same case, asking for the direction of the court, and and

His Lordship, after some discussion, directed that the name of the foreign company should be removed from the notice of motion. The motion as against the comptroller would stand over till the present week. Meanwhile a letter might be sent to the company, with a copy of the notice of motion, stating that an application would be made on that day affecting their interests.

COPPER IN TINNED PEAS.

AT Leeds Borough Police Court last week, Mr. Bruce, the stipendiary magistrate, had several cases before him in which information was laid under the third section, sub-section A, of the Sale of Food and Drugs Act, 1875, against William Green & Son, grocers, 51 Briggate, for having sold tinned peas adulterated with 47 grains per lb. of sulphate of copper; against Burgon & Co., provision dealers, 10 Duncan Street, for having sold tinned peas containing 340 grains per lb. of sulphate of copper; and against Thomas Yeardley, grocer, 150 Briggate, for having sold peas which contained 27 grains of sulphate of copper per lb. The case against Messrs. Green & Son, for whom Mr. Foster, solicitor, appeared, was taken first.

Sir George Morrison having opened the case, explaining that the peas were purchased by Inspector Walker and reported on by Mr. Fairley, the borough analyst, the evidence of the purchaser was taken.

Dr. Cameron, medical officer of health for the borongh, said, in answer to Sir George Morrison, that, in his opinion, the quantity of sulphate of copper found in the peas would be injurious to health. In cross-examination by Mr. Foster, Dr. Cameron said the question as to whether or not sulphate of copper was injurious had been a matter of discussion, and there were some experts who declared that a small quantity was not deleterious to health. He did not think 45 grains to the pound a large amount, but it was dangerous. He had not heard of a case where harmful results had followed the eating of tinned peas, though he knew they were extensively sold. He was, however, aware of plenty of cases in which copper taken in small quantities had done harm. The quantity of copper found by Mr. Fairley would not produce acute copper-poisoning, but it would injure the health. He should say the copper was used to give the peas an unnatural colour, rather than to preserve their natural colour. The question as to whether the use of sulphate of copper was injurious had been thoroughly gone into by the French Government, the peas coming mainly from France. Until recently they prohibited the use of sulphate of copper, but the restriction had been removed owing to pressure brought to bear by the manufacturer.

Re-examined: The poison was cumulative. Five grains of sulphate of copper would kill a dog.

Mr. Thomas Scattergood, dean of medicine at the Yorkshire College, corroborated. Mr. Foster, in defence, said that no person was liable to be convicted under the third and fourth sections if he could satisfy the justices that he did not know the article of food was mixed with anything deleterious to health, and had taken reasonable means to obtain such knowledge. His clients did not know. According to Dr. Cameron's evidence, the defendants could not tell that sulphate of copper was present from the appearance of the peas. With regard to the point whether sulphate of copper was injurious to health, it was important there should be a judicial decision. None of his clients' customers had made a single complaint, however, and the peas had been bought by some of the best families in Leeds. The peas were imported from France. They were what were known as the "Globe" brand, and as soon as Messrs. Green heard of another case which was before his worship they wrote to the makers, who replied that the peas were subjected to a slight colouring process in order to retain their natural colour, but that the process was recognised as being uninjurious. Upon getting the summons the defendants again wrote. He (Mr. Foster) contended that the taking of these steps showed Messrs. Green's *bona fides*, and entitled him to ask for the dismissal of the summons under section 5.

Mr. Bruce pointed out that the defendants might have sent a tin of the peas to an analyst.

Mr. Foster thought that if such a course had to be adopted in these cases, it imposed rather an onerous duty on retailers.

Mr. Bruce: I can't help that. I have nothing to do with the making of laws.

Mr. Wm. Green having given formal evidence in support of Mr. Foster's statements,

Mr. Bruce summed up the case, and said that if it was put to him as a question of law, he did not think the defendants had taken reasonable steps to find out whether the peas contained any deleterious matter. He should convict; but he thought it would be sufficient if he ordered the defendants to pay a nominal fine of 1s. and costs. He wished it to be understood that if others were summoned after this warning, they must expect to be fined considerably more than 1s. [The defendants, at the request of Sir George Morrison, gave an undertaking that the peas would be destroyed.]

After a short discussion Mr. H. Thornton Pullan, who appeared for Messrs. Burges and Mr. Yeardley, pleaded "Guilty" in their cases, and similar fines were imposed.

HINCKLEY'S LINIMENT.

In the City of London Court on Monday, before Mr. Roxburgh, and a jury, the case of *Coleman v. Pankhurst* was heard, which was a claim for damages for alleged misrepresentation as to the value of a business, and 100*l.*, the purchase-money. The plaintiff, Mr. A. J. Coleman, was introduced to the defendant, a stockbroker's clerk, residing at 53 Canfield Gardens, South Hampstead, in September of last year. At that time the plaintiff was desirous of purchasing a business, and negotiations which were entered into with the defendant resulted in his purchasing of the defendant for 100*l.* and certain royalties a secret for the manufacture of an embrocation. This embrocation the plaintiff afterwards made and sold under the name of "Coleman's Perfected Embrocation." The venture did not prove to be a financial success, and the plaintiff experienced difficulty in the manufacture of the embrocation. His case was that he bought the secret on the defendant's representation that the embrocation was what had been known up to that time as "Hinckley's Liniment," and that he (defendant) was the sole possessor of it, he being the inventor, and the business of Hinckley & Co. having lapsed. He afterwards discovered, however, that "Hinckley's Liniment" was being manufactured by a Mr. Smith, of Farringdon Road, and that that gentleman was the owner of the business formerly carried on under the name of Hinckley & Co., having purchased it from a Mrs. Martha Smith. Not only, he said, was the liniment which he had purchased from the defendant different to Hinckley's, but it was really impossible to manufacture it, and, therefore, it was worthless. He now

claimed the return of the 100*l.* paid to the defendant, and 160*l.*—expenses which he had incurred in connection with the matter. The defendant denied that he ever told the plaintiff he was selling him Hinckley's process, and said it was well understood by the plaintiff at the time the agreement was entered into that the process was entirely different to Hinckley's. In the agreement which was put in no mention was made of the latter process, and it was argued that the fact of the plaintiff calling the embrocation which he manufactured "Coleman's Perfected Embrocation," and the fact of his trade-mark being different to that used by Hinckley's, went to show the truth of the defendant's story. There was a counter-claim by the defendant for 20*l.* balance of purchase-money. The jury found for the plaintiff on the claim for 50*l.*, and for the defendant on the counter-claim for 20*l.*

BANKRUPTCY REPORT.

Re FRANCIS GEORGE HALL, Market Place, Newbury, Chemist and Druggist.

THIS debtor attended at the Newbury County Court on Wednesday last week, before Mr. Registrar Pinniger, for his first public examination by the Official Receiver, Mr. Cecil Mercer. The bankrupt's statement of affairs showed liabilities, 757*l.*, and assets, deducting preferential claims, 264*l.* 14*s.* 8*d.* He stated that he commenced business in Newbury, thirty-two years ago, with a capital of 300*l.* The premises in which he had traded were his own, but they were subject to two mortgages—the first for 750*l.* (and, with unpaid interest, 766*l.*), and the second for 400*l.* The premises were sold the day previous for 350*l.* The books he had kept were ready-money book, day-book, and ledger; he had kept no cash-book showing receipts and expenditure, and had never prepared a balance-sheet. He last took stock ten or twelve years ago. He produced an account of receipts and payments. His business was not much of a ready-money affair, being nearly all booking. He generally kept the books himself, and his son helped him in the business. His son did the dispensing part, and carried on the business during his absence. He could not say if the whole of his payments were entered in the statement he had prepared for the Official Receiver, as he had been ill on two occasions during the last two years—once six months and another time five months, and part of that time could not leave his bedroom. His statement showed that in 1889 he received 382*l.*, and had paid away 519*l.*

The Official Receiver: But it would be an impossibility to pay 519*l.* out of 332*l.*?

Debtor admitted it, but explained that he was enabled to do this by borrowing money. Yet he did not know that he had to show this. In 1890 he received 350*l.* and spent 430*l.*, the difference being made up by borrowed money. He began borrowing in 1888. He did not then think he was insolvent. He thought that, if he could pay off his trade creditors and get rid of the pressure, he would be able to pull himself round.

What were your liabilities in 1890?—I cannot say without consulting my books.

The Official Receiver: You had better show this next time.

Debtor further said that he borrowed money of Mr. Chamberlain in 1888, for which he paid 6 per cent., and some twenty years since he had borrowed money from the late Mr. Robert Johnston, for which he paid 10 per cent., and a much higher rate at one time. The amount actually received was about 50*l.* He received from 1,600*l.* to 2,000*l.* at different periods through his wife, the last instalment being eight years ago. It was, perhaps, neglect that he had not repaid the borrowed money with this. The whole of the money from his wife went into the household. He owed a sum of 113*l.* to the Newbury Land and Building Company for land purchased at Greenham in 1880 for 70*l.* or 80*l.*, the difference being accumulations of interest. He had made unfortunate investments in the Land and Building Company, and also in the Didcot, Newbury, and Southampton Railway Company. The shares in the latter, together with some in the Newbury District Water Company, were held by his bankers for overdraft. His good book debts amounted to 47*l.* Two years ago he could have met his trade liabilities.

The examination was adjourned.

A MIDSUMMER NIGHT'S DREAM.

IT was about 12.30 on Saturday night, or rather Sunday morning, and after a hard day's work I had been steadily reading through THE CHEMIST AND DRUGGIST Summer Issue with unflagging interest. Now, I have not long been installed in my small, but consequently very manageable, business, and it seems but a few weeks since I obtained the qualifying certificate from Bloomsbury Square. I have often thought it might not be ill done if I joined the fast-increasing ranks of those who record Minor experiences, and this idea recurred on reading "An April Candidate's" description.

The Summer Issue lay upon my knee as I contemplatively took a retrospective view of the memorable day when I passed through these same subjects, and held converse with the same examiners. I thought, as the smoke from my nearly extinct pipe curled up, that in its fantastic wreathings it resembled that resedaceous plant that I nearly came to grief over. The hum of voices in the examination-hall was slowly re-formed by an imprisoned bluebottle's attempts to cremate itself on the gas globe, and the rattle of some ill-placed jars in the shop behind, with the passing of every vehicle, resolved itself into the clink of pestles from the dispensing-room. I looked up; someone was beckoning me from the end of the large room, and a voice said on my right, "Mr. Scales—*Materia Medica*." My dream had begun.

"Mr. Scales," said the examiner, whose dexterity in rapidly changing his personality was as wonderful as my indifference at the phenomena—it seemed to me the proper way for a gentleman to conduct himself—"Mr. Scales, what relation subsists between grass oils and widow designs, and why are they both cultivated in sealing-wax?" I at once remembered to have recently seen this problem elucidated in THE CHEMIST AND DRUGGIST, and was about to reply with beaming confidence, when the examiner, who now resembled a Nuremberg calamus-seller, with the features of Mr. Carteigne, handed me a phrenological head, and remarked, "Now, Mr. Scales, attend to me"—(he had now assumed the form of the old lady who always came at closing time for "1d. of chlorid o' lime!")—"here is a Roman amphora. How would you proceed to determine its constituents according to this table of urine analysis?" I hesitated; yet I had a vague recollection of having seen somewhere a description of the process. "If I can only remember how it began!" I said to myself, feeling very hot and uncomfortable. The examiner never moved, but leered at me in a dozen different forms.

A hand touched me on the shoulder. "Mr. Scales," said an old friend, who had looked in at my shop only that morning, "will you kindly read me this prescription?" I looked at it. A wildly confused mass of capital R's and inverted S's and figures—meaningless, undecipherable. My old friend did not seem to know me, but pointed to the "prescription." "My dear Frank," I began, in expostulation, when all at once an idea struck me. I looked again. Why, yes! to be sure, these are the new unofficial formulæ! See there: Ungt. hydrarg. detannat, glycerin. Xeric. I looked up eagerly, to assure the examiner that I could now get on all right, but he was gone.

By some impulse I advanced towards a distant door, and stepped carefully over a crocodile and uncouth lizard that crawled over the floor. Passing a window, I looked out, and saw smoking chimney-stacks, and warehouses with "A Glad New Year," "Our Town Specialities," and other curious legends upon them. But I had reached the door, and opened it, when something swept past my knees. I looked down and saw a curious machine—a heap of wheels, levers, and capital R's at my feet. I smiled, and said, "Ah! a broken congress compact." Suddenly there was a gust of wind; the door I held fell to with a crash, and I sprang to my feet.

The Summer Issue lay upon the floor, and a cold breeze was blowing through the open window. I laughed, and said to myself—"What a curious dream . . . There will be rain to-night," closed the window, picked up the Summer Issue, and went upstairs. The clock struck one, and the ointment-jars rattled once again as a belated cab drove past.

NEW COMPANIES.

RICHMOND BOTTLING COMPANY (LIMITED), with a capital of 10,000*l.* in 1*l.* shares, to acquire the businesses of mineral-water manufacturers and beer-bottlers carried on by Dines & Williamson (Limited), at Richmond, Surrey, and to carry on the same. The first subscribers (who take one share each) are:—J. Bonella, 43 Sheen Park, Richmond, licensed victualler; J. Bishop, 4 Lovaine Terrace, Parsons Green, gentleman; E. H. Dines, Richmond, mineral-water manufacturer; A. T. Williamson, Prince's Road, Richmond, mineral-water manufacturer; H. Dobbin, 4 Balmuir Terrace, Putney, gentleman; A. C. Codd, Brixton, S.W., gentleman; G. F. Whitefoot, 6 Manor Road, Richmond, clerk. There shall not be less than three nor more than seven directors, and the first are H. Dobbin, J. Bonella, J. Bishop, E. H. Dines, and A. T. Williamson. Qualification, 100*l.* shares; remuneration, 150*l.* divisible.

FRAZER'S TABLETS (LIMITED).—Capital of 30,000*l.* in 5*l.* shares. Objects: To acquire the undertaking of a patent-medicine manufacturer and vendor, now carried on at 11 Ludgate Square, under the style of Frazer & Co., in accordance with an agreement made June 30, between H. W. Sharp, A. W. Dunnington, and Mr. Dunnington, of the one part, and W. Lea, on behalf of the company, of the other part; and to carry on and develop the said business. The first subscribers (who take one share each) are:—J. G. Langton, Beckenham, Kent; B. Webb, 16 St. Helen's Place, E.C.; H. Jones, 17 Cumberland Terrace, Harringay; E. Wills, 20 Ashchurch Grove, Shepherd's Bush; N. C. Ashton, 24 Claremont Road, Cricklewood; W. D. Barrett, Crofton Lodge, Crofton Park, Brockley; J. W. Soppitt, 7 Brownswood Road, Finsbury Park.

LESLIE & CO., OF CHICAGO, U.S.A. (LIMITED), with a capital of 6,000*l.* in 10*l.* shares. Objects: To carry on in the United States of America or elsewhere the business of manufacturing chemists and druggists, surgical-instrument makers, and manufacturers of druggists' sundries. The first subscribers (who take one share each) are:—J. Sebastian C. Renneck, 21 Cranley Gardens, merchant; W. Davison Gracechurch Street Buildings, merchant; W. C. Galloway 50 Gresham Street, E.C., solicitor; W. L. Crowe, 4 Bishopsgate Street Within, merchant; J. Baly, J.P., Castle Hill, Warwick, chemist; W. C. Wilmore, Coventry Road, Warwick, plaster-maker; L. W. Goodwyn, Church Road, Hanwell, land agent, &c. There shall not be less than two nor more than five directors, and the first are J. S. C. Renneck, W. Davison, and A. P. Knight. Remuneration to be determined in general meeting. Registered office—Bond Court House, Walbrook, E.C.

BRITISH INSTITUTE OF PREVENTIVE MEDICINE.—Registered as a limited liability company, without the word "limited," by license of the Board of Trade. Objects: To study, investigate, discover, and improve the means of preventing and curing infective diseases, and to provide a place for such research to be carried on, and to provide instruction and education to medical officers of health, practitioners, veterinary surgeons, &c. The first subscribers are:—Sir Joseph Lister, Bart., F.R.S., 12 Park Crescent, W.; Sir G. M. Humphrey, F.R.S., Grove Lodge, Cambridge; Sir H. E. Roscoe, M.P., F.R.S., Bramham Gardens, S.W.; C. S. Roy, F.R.S., 2 Wollaston Road, Cambridge; W. W. Cheyne, F.R.C.S., 59 Wellbeck Street, W.; J. S. Turner, F.L.S., 81 Anerley Road, S.E.; E. Millais, 31 Grosvenor Road, S.W.; Sir T. S. Wells, Bart., 3 Upper Grosvenor Street, S.W. Registered office—9 New Square, Lincoln's Inn, London. The number of members is unlimited. Their individual liability, in the event of the winding-up of the company, is limited to 10*l.*

THE GERMAN CANCER EXPERIMENTS.—Professors Bergmann and Hahn have sent into the Prussian Ministry of Public Instruction their reports regarding the alleged experiments in inoculating patients with cancer virus. In medical circles it is considered that the report will completely justify the experiments in question, but this will not be definitely known until the report is published.

Trade Notes.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED) have just published a neat pamphlet on the history and uses of creolin and Jeyes' fluid, of which they will send a copy free of charge to any chemist who asks for it.

MR. VINCENT WOOD wishes us to add to the note in last week's issue regarding the accomodato-attachment suspensory bandage that the suggestion came originally from Messrs. Hockin, Wilson & Co., and in future he will fill orders for this particular make of bandage through that firm.

MESSRS. H. K. MULFORD & CO., druggists and pharmaceutical chemists, of Philadelphia, have been incorporated under the style of the H. K. Mulford Company. Milton Campbell has been elected president; H. K. Mulford, vice-president; J. W. Lethead, secretary and treasurer; and E. V. Pechin, superintendent. The capital is fixed at \$100,000.

"HOW DO I STAND?"—Messrs. Mawson, Swan & Weddell, Newcastle-on-Tyne, write us this week to say that, having still for gratuitous disposal some hundreds of the above volume, they will be pleased, on application, to send a copy to any chemist, whether registered or not, either in this country or abroad, who may not have already received one.

ANILINE-DYE DIVIDENDS.—The Badische Anilin und Soda Fabrik, in Ludwigshafen, returned to its shareholders a dividend of 22 per cent. as the result of last year's trading. The firm have established a branch house in Russia (owing to the heavy duty upon imported coal-tar products in that country), which, in 1890, on a capital of 1,038,000 roubles, earned a profit of 116,037 roubles.

Personalities.

A SUM of 52*l.* 2*s.* has been subscribed towards the testimonial to Mr. Wilhelm Mehl, referred to in our issue of last week, and with that amount Mr. Mehl was presented privately to-day.

MR. A. A. BONES has purchased the business of Mr. Loveitt, 23 Broad Gate, Coventry, which is one of the oldest drug businesses in the kingdom, having been in the Loveitt family for a century. It is still to be carried on under the old name, Loveitt & Co.

MR. FRED. FOSTER, of Messrs. Barnett & Foster, referring to our Town Traveller's note in last week's issue, states that he is not now in the volunteer service, having resigned about two years since, with the title of lieutenant-colonel and a right to wear his uniform, after nearly thirty years' service.

MRS. AYER, the widow of the American speciality manufacturer, has come to London, and it is stated that she will take a house of her own here next season. Meanwhile, she has placed herself in the hands of Mrs. Ronalds, also an American. So say the society papers. Mrs. Ayer is enormously rich.

MESSRS. R. W. GREEFF & CO., the agents for Mr. J. D. Riedel's Salipyrin, have appointed Messrs. Allen & Hanburys, of Plough Court, Lombard Street, E.C., sole consignees for the sale of that article in the United Kingdom. Salipyrin has just been very favourably commended by Dr. von Mosen-geil, Professor of Medicine in Bonn.

MR. A. BLOXAM, F.I.C., late demonstrator of chemistry at the Royal Agricultural College, Cirencester, has been appointed head of the chemistry section at the Goldsmiths' Company's Technical and Recreative Institute at New Cross. The lecture-rooms and laboratories have been fitted up under the direction of Sir F. Abel, F.R.S., and are exceedingly complete.

DR. KOCH'S APPOINTMENTS.—The following explanation is given by a correspondent of the report that Dr. Koch had voluntarily resigned all his appointments. The real facts of the case are as follows:—The doctor was originally professor of hygiene in the Berlin University, and as such was com-

elled to lecture regularly. The recent researches on the subject of tuberculosis convinced the Government of the advisability of founding a bacteriological institute, where the professor could devote the whole of his time to his speciality. Notwithstanding the *fiasco* in relation to the cure of tuberculosis, the Government kept its word, and, the institute being now completed, Dr. Koch has been released from his professorship and has been appointed its director. It is still believed that the University will invite him to lecture occasionally, but Dr. Koch is displeased with the Government reference to tuberculosis, and has confided the continuation of his researches in regard to the cure of the disease to Drs. Botkin, Kitasato, Pfuhl, and Dohnitz, in whose names the results will be published, Dr. Koch not wishing his name to appear.

IRISH REGISTERED DRUGGISTS' EXAMINATION.

BY A JULY CANDIDATE.

WISHING to be registered as a druggist under the Irish Pharmacy Act of 1890, I filled in the necessary form which candidates for examination are required to do, and sent it to the Registrar in Dublin. Being an assistant previous to 1875, I came in for easier terms and fees than more recent ones, whose fees are 4*l.* 4*s.*, while I only paid 2*l.* 10*s.* 6*d.* My form was signed by two justices of the peace. I was called upon to appear on July 14, at Queen's College, Belfast, to undergo examination, and thither went I, in due course, arrived before the appointed time, which was 10.30, expecting to get seated and, perhaps, to have a look round the room before the examiner, Dr. D. J. McKinney, should arrive, and thus be able to cool my brain and collect my thoughts "before the struggle," as the novelists say.

But such was not my good fortune. With several others, I was met at the door by the hall-porter, who, courteously enough, asked us to go upstairs and inspect the museum—as if we had never seen enough of curiosities in a drug-shop in the shape of old stock! He could not have sent us on a more disagreeable voyage of inspection: for what could grim skeletons and stuffed birds do to soothe the heart of an aspirant druggist? We walked about, read our notes, chatted, and worshipped before the goddess Vacuna, until the examiner arrived. "But, hush! hark!" as Byron says, "a car rattling o'er the stony street"—and so it was: a modern Irish car, with our examiner in it. Our hearts bobbed up and down as he drove up the avenue.

But our fears were soon dispelled, for Dr. McKinney does not strike terror by his looks, like some examiners: his face is full of sympathy. He brought his samples, &c., with him. After a bit, we were ushered into what was once the library, but is now used as an examination-hall. It has a lofty ceiling, and is decorated with some oil-paintings and fine portraits of late presidents of the university.

We were soon seated at our respective desks, when the doctor gave us notice to be ready and write down the questions, which he gave out in a clear voice. The questions were:—

1. What is senna adulterated with?—and describe how you would detect it.
2. Mention the preparations of ergot of rye, and what precautions you would take when selling it.
3. Write down all the poisonous extracts of the British Pharmacopœia.
4. If you received a parcel supposed to be iodide of potash, without any label or address, what means would you take to make yourself certain?

I wrote the answers satisfactorily in a short time. We considered the questions easy, as nearly every one expected to get some part of the Poisons Act to write down verbatim, and with which I came prepared, like a schoolboy, my head filled with all sorts of rhymes and alphabetical lists, to make myself certain that my memory would not betray me.

Having finished my paper, I had time to look about me and scrutinise my fellow-candidates, while others were up before the doctor.

I found that we were in all twenty-four: some were young, others advanced in life, but still vigorous and

strong, and some seemed fresh from the country. Eight belonged to the city famous for riots and linen, shipbuilding and lemonade; the remainder were scattered over the north of Ireland—from the far west, near Roscommon, to the beautiful Loughmore on the east. Some were humorous, while others were dull: one was immensely so, and in a piteous voice begged the examiner, when up before him for his *rivâ vocâ*, to take him easy. "Doctor dear," said he, "don't keep me too long, for I've been on the 'booze' two or three days, and I came away this morning without my breakfast." When finished, this bright youth told me, with a wry face, "he was nearly poisoned." Others were like criminals waiting their doom, and a few, while writing their papers, occasionally cast hopeless looks of despair around, as if they had got a puzzler which was likely to remain unsolved by them.

We were all alphabetically arranged on the examiner's list, and took our turn accordingly. When the porter called out my name I hurried up to the platform at the end of the room, and stood beside the doctor. He held up a small sheet of paper before me, and written on it were some figures of the numerical notation, commencing with millions, which I read easily. I was somewhat relieved in mind by this simple test of arithmetic, and fancied at the moment that the remainder of the examination would not be difficult.

The doctor had the samples of roots, barks, &c., nicely arranged in rows on the table, at the end of which sat two large specimens in the flesh—one the mortar, and the other the pestle—looking after the interests of the druggists and the pharmacists. I had no time to look at them, knowing they would be scrutinising my answers. The examiner said to me, "Start here," pointing to the samples (which were very good), "and go along the range"; which I did with ease and satisfaction, knowing them perfectly. Some of them I remember, viz.:—Buchu leaves, senega root, canella bark, sassafras, digitalis leaves, sarsaparilla root, socotrine and Cape aloes, &c.

He pointed out juniper berries, and asked me if I knew them, which I did; his reason for so doing, I learned afterwards, was that some of the "boys" did not know them. He then gave me some chemicals, such as bluestone, salicylic acid, hyd. c. cretâ, and a few others, especially one fine crystal in a small wide-mouth bottle, which I did not know, as it first had a sweetish, then a saline, taste; but unexpectedly, to my delight, the doctor said that would do, and accordingly I descended from the platform and resumed my seat, but only for a short time, as, shortly after one o'clock, I had a favourable verdict, which enabled me to get home in good time for dinner—not the least important physical consideration after the intellectual drain I had gone through.

Medical Gleanings.

EUCALYPTUS OIL IN SCARLET FEVER.

DR. C. KNOX BOND, of the Liverpool Fever Hospital, reports to the *Lancet* that he has used eucalyptus oil in the treatment of forty-seven cases of scarlet fever, and the conclusion arrived at is that, as a curative agent, it possesses no value, that it neither mitigates the severity nor modifies the course of scarlet fever, that it fails to prevent serious complications and sequelæ arising in due course, and that as an auxiliary to the ordinary methods of treatment it possesses no obvious advantages.

ARSENIC AS A DRUG.

MR. JONATHAN HUTCHINSON devoted one of his post-graduate lectures to this subject, and a report of it appeared in the *British Medical Journal* recently. He described the cases in which arsenic seems to be of most use, calling attention to the tolerance of the drug by children, and showing that if it is possessed of tonic properties, which in a general way he doubted, patients are always glad to leave it off, nor do they miss it as they do nux vomica and similar tonics. As to the accumulation of arsenic in the system, he thought that patients seldom receive general injury to the health through taking too much, as the symptoms of over-

dosing come on gradually, and, if patients are under medical supervision, the condition is readily detected. It is different when patients suffering from skin diseases continue to use medicines containing arsenic without taking further advice, and "it is then possible that serious—even fatal—results may ensue." Speaking of the experience of the last quarter of a century, Mr. Hutchinson, in concluding his lecture, said that "we cannot claim to have made any discovery as to its mode of action. We know for certain that it will cure psoriasis, pemphigus, and their allies, and that it will prevent the recurrence of recurrent herpes and many other relapsing maladies. We never cease to wonder at the extreme rapidity and certainty with which, in some of these, its effects become manifest. How those effects are brought about, however, we cannot even guess. We know also that it may, whilst curing some diseases, produce others. That it has some peculiar affinity for nerve-tissue, and some peculiar influence upon nerve-function, we may safely believe; but further than this we can scarcely go. As regards its general employment as a remedy for skin diseases, whilst recent observations have strengthened our faith in certain directions, they have limited it in others, and they have impressed upon us the great need of caution. They leave us with the practical creed that we may, as heretofore, freely avail ourselves of its services, but that we must, perhaps rather more than has heretofore been felt necessary, watch its effects, and be prepared, if need be, to forbid its further use."

CACTUS GRANDIFLORA.

PREPARATIONS of this plant have recently acquired a certain prominence in the United States as a cardiac tonic. According to Dr. John Aulde, of Philadelphia (*Therapeutic Gazette*), it is free from the so-called cumulative action of digitalis, and less objectionable to the palate than either nux vomica or strophanthus. It carries with it no narcotic effects, nor does it produce any material constriction of the arterioles, while it appears to possess valuable properties in regulating the movements of the heart, whether the irritability be due to "nervousness" from reflex causes, or to the presence of organic changes. The fluid extract is the preparation which Dr. Aulde recommends. This is given in doses of 5 to 10 minims, and when there is disturbance of the stomach it is advisable to combine it with nux vomica and one of the digestive ferments, as in the following prescription:

Ext. cacti grandiflori	..	..	..	5ij.
Tr. nucis vomicae	..	..	..	3ii.
Liq. pancreatin. ad	..	..	..	3iij.

M.

Sig.: One teaspoonful with meals.

Cases of sexual exhaustion are remarkably benefited by the exhibition of cactus, doubtless because it lacks those peculiar stimulating properties which it is so important to avoid. Its action in these cases may be appreciably increased by the judicious exhibition of nux vomica, damiana, and phosphorus:—

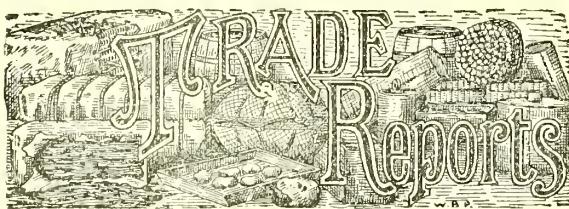
Ext. cacti grandiflori	..	..	..	ij.
Tr. nucis vomicae	..	..	..	5ij.
Ext. damianæ	..	..	..	3iv.
Glycerini				
Tr. gentianæ comp. aa. ad	..	..	..	3iij.

M.

Sig.: One teaspoonful after meals.

Patients who suffer from exhaustion, with irregular or intermittent pulse, due to the abuse of tobacco, are also greatly benefited by 5 to 10 drops of the fluid extract twice a day; and the same applies to persons suffering from nervousness through the excessive use of tea.

ELECTROLYTICAL DEHYDRATION OF VITRIOL.—The small quantity of water that cannot be eliminated from ordinary vitriol by rectification is said to be removable by electrolysis, being decomposed into oxygen and hydrogen before the acid itself suffers change. In order to avoid the decomposition that might occur, M. Léon has recently patented a process in which platinum electrodes of large area, kept cool by the circulation of water through them, are used. The bath itself is also cooled.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollect that for many articles the range of quality is very wide.

42 CANNON STREET, July 31.

THE drug and chemical markets have been exceedingly slack this week, and there does not seem to be any immediate prospect of improvement, many Mincing Lane men having left town for the holidays. In chemicals the bromine war continues to excite attention, and bromine salts have been further reduced in price this week. Camphor is also weak and lower. Quinine is flat, although some improvement is claimed for it at the close of the week; Messrs. Howards have "dumped" the market by reducing their list price for the drug. Permanganate of potassium is dearer, and glycerine continues its steady rise. The drug market offers hardly any new features. Chilian honey and beeswax, cod-liver oil and HGH peppermint are a little dearer. Otto of rose is expected to rise; opium is momentarily—but only momentarily—firmer; and ergot of rye remains well held. Cinchona is firm, but without appreciable improvement. Senega root and rose leaves are both offering at lower rates. In the outside markets things remain almost stagnant. Cochin ginger, after a good demand privately, has receded at public sale; and Jamaica ginger, cloves, and chillies are also easier. Guinea grains realise very high prices. Shellac is again firmer, while gambier keeps steady. The price of bleaching-powder has been in advance, and "chemical" nitrate of soda appears inclined to rise. China galls are somewhat lower. Ghatti gum is fully maintained in value, but there has been a heavy fall in Australian and Kordofan ("Turkey"). Salts are also lower. Phosphorus is offering at a reduction. The Bank rate remains unaltered at $2\frac{1}{2}$ per cent. The Eastern exchanges have slightly advanced since last week, the following being the position to-day against last Thursday:

	Bombay	Calcutta	Hongkong	Shanghai
July 24 ...	1/5 ³ / ₈	1/5 ³ / ₈	3/3	4/6
,, 31 ...	1/5 ⁷ / ₁₆	1/5 ⁷ / ₁₆	3/3	4/6 ¹ / ₂

The price of bar silver to day is $45\frac{15}{16}$ d. against $46\frac{1}{2}$ d. per oz. last Thursday.

THE POSITION OF FOREIGN EXHIBITORS AT CHICAGO.—From a correspondence between the Commissioner for France and the Director-General of the Chicago World's Fair, it appears that with regard to the insurance of goods on exhibition there will be no difficulty in making satisfactory arrangements for the most reasonable rates in French, English, or American companies. The management has taken special care to make adequate provision for spice, and to have everything as nearly fireproof as may be, so that it is reasonably certain that rates of insurance will not be excessive. With regard to the sale of exhibits, and to the provisions of article 24 of the exhibition regulations, stating that sales of special articles will be subject to further regulations, the French Commissioner asked, in the interest of French exhibitors, that a pledge should be given that sales would be allowed. In answer to this the Director-General states that the rule adopted in regard to sale of articles on exhibition upon the grounds is that the exhibit shall not be impaired by reason of such sales. This is obviously indispensable to the proper conduct of the exposition. If sales are made, and deliveries had, it would have to be under a

regulation which would provide that the articles would be immediately replaced, so that the exhibit as a whole would not deteriorate.

THE TRADE OF THE AUSTRALASIAN COLONIES.—The different positions in which the Australasian Colonies stand in regard to their imports and exports is shown by the subjoined figures, compiled by Mr. H. H. Hayter, the Government statistician of Victoria. It will be seen that, in the case of Victoria, the imports are 9,683,000/- higher than the exports. In Western Australia and Tasmania also the imports are more than the exports, but in the case of the four other colonies the balance is the other way:—

Colony	Imports £	Exports £
Victoria	22,954,015	13,266,222
New South Wales	21,370,039	21,925,342
Queensland	4,825,622	6,604,696
South Australia	8,232,673	8,827,378
Western Australia	874,447	671,813
Tasmania	1,897,512	1,486,992
New Zealand	6,230,525	9,811,720
Grand total	63,445,833	62,594,163

The value of the wool exported from the Australasian Colonies in 1890 was over 24,000,000/-.

OUR COMMERCIAL BAROMETER FOR JUNE.—The Imperial Federation League publishes the following "readings," based upon the Board of Trade returns for June:—*Imports:* For the first time this year the tonnage both of imports and exports shows a small increase. The value and average price of imports exhibit a large increase, caused mainly by large importations of articles of food and raw materials for textile manufactures. In five other groups there has been a moderate increase, not exceeding in any one 8 2 per cent.; in three others there has been a moderate decrease not exceeding 7 per cent.; and in one, tobacco, a decrease of 18 4 per cent., although in the consumption there has been an increase of 6 4 per cent. The average price of wheat has increased 14 7, and that of wheat-flour 12 6 per cent. Among raw materials the increase of raw cotton has been 25 3 per cent. in quantity and 25 06 per cent. in value, indicating a slight reduction in price. The increase in quantity of sheep's-wool was nearly a third—32 7 per cent.; the increase in value was only 25 8 per cent., showing also a reduction in price. In the metal group there was a decrease in the importation of iron ore and tin, with an increase in other items. *Exports:* The tonnage, as has been already stated, shows an increase. The small decrease in value arises solely from the abnormal increase in June, 1890. The export trade of June and September is, as usual, below the average of the year. The small decrease in the last month has been caused entirely by a decrease of 10 1 per cent. in yarns and textile fabrics, and of 9 6 per cent. in colonial and foreign merchandise. All the other groups show an increase, amounting in the case of live animals to 36 5 per cent., and in that of metals to 11 9 per cent. The decrease in British produce and manufactures was less than 1 per cent. (0 4); while that of colonial and foreign merchandise was 9 6 per cent.

A CEYLON EXHIBITION.—Animated probably by the example of their Jamaican fellow-colonists, the Ceylon people are taking steps to organise an exhibition illustrative of the products of their island. With this object a meeting was held, on July 1, at Colombo, at the invitation of the Hon. A. R. Dawson, Government Agent of the Western Province. The last Ceylon exhibition, in 1883, was most successful. The Government of Ceylon, which is said to be in the singular position of being embarrassed with a plethora of funds, is appealed to for a liberal subvention of the proposed scheme. The best suggestion made at the meeting was that the Colombo exhibition should be looked on as a sort of preliminary to the great exposition of Chicago, and the best exhibits sent on there.

ACID (CARBOLIC).—The market for carbolic crystals remains in a very depressed condition, though there is no change in the nominal quotations.

BROMINE SALTS.—The German bromine Syndicate have made a further reduction of 2*d.* per lb. in their price for bromine, the total fall in their quotations amounting to 6*d.* per lb. from the highest point. This reduction has enabled the English bromide manufacturers to offer the salts at lower prices than their American rivals, their quotation for *Bromide of potassium* being now 1*s.* 1*½d.* per lb. for 10-ton lots. The American agents are out of the market at present, their lowest figure being still 1*s.* 2*½d.* per lb. c.i.f. terms, as last week. Shipments of German bromide of potassium are on their way to New York to carry the war into the enemy's country. The bromine war, says an American report, dated July 16, is on in earnest, and the Germans show that they propose to fight to a finish by asking for orders here at 18*c.* per lb., inclusive of containers. Whether the offer has been met by the American bromine men, we cannot say; but so far manufacturing chemists are holding back. The idea of being able to purchase bromine at say 14*c.*, while potassium bromide is selling at 29*c.*, is a strong inducement for manufacturers to into the business again.

BUCHU.—After a prolonged want of supply, 4 bales came to hand this week from Cape Town, per *Mexican*.

CAMPHOR (REFINED)—English refined camphor, from the makers, remains unchanged since our last report. The tendency, however, is distinctly weaker, and German refined bals are offering at 1*s.* 6*d.* per lb. on the spot, or 1*s.* 5*½d.* per lb. forward net price.

CARAWAY SEED.—The Dutch crop is a small one, and the quality is dark, and leaves much to be desired; nevertheless, the price at present is low—namely, 17*s.* 6*d.* per cwt., while old seed is quoted at 18*s.* to 18*s.* 6*d.* per cwt.

CASCARA SAGRADA.—We understand that there is no more offering at the recent low price of 25*s.* per cwt. A parcel which was announced for sale last week was withdrawn before the auctions. We believe that from 27*s.* 6*d.* to 28*s.* per cwt. is now the nearest quotation for good quilly cascara.

CASSIA LIGNEA.—China advices, dated June 25, report that the price of this article is tending somewhat higher, because it has attracted speculative attention, mainly on the part of American buyers. There is a stock of from 7,000 to 10,000 piculs in Hongkong.

CHAMOMILES.—Business is almost at a standstill in anticipation of the arrival of the new crop of Belgian flowers, which is fully two months late this season, and not likely to be on the market until well into August; for fair quality old flowers 42*s.* to 43*s.* per cwt. is asked.

CHILLIES are cheaper, 76 bales fair old Zanzibar, rather dull in colour, having sold at 40*s.* to 40*s.* 6*d.* per cwt. at auction without reserve.

CLOVES.—Zanzibar cloves have sold privately at lower prices this week—viz., 3*½d.* per lb. for fair quality; and at the auctions some lots changed hands at 3*½d.* to 3*¾d.* per lb. Geod picked Penang realised 11*d.* per lb.

COCA-LEAVES—Market firm, and very scantily supplied. Good bright green leaves are offering at the rate of 1*s.* 5*d.* per lb. from Hâvre, where a consignment of 20 small bales was recently received from South America. Hamburg quotes 1*s.* 4*½d.* per lb., but the leaves it offers are not so good as those from Hâvre.

CUBEBS.—The exports of cubebs from Java in the eleven months from July 1 to May 31 have been:—1888-89, 766 piculs; 1889-90, 1,148 piculs; 1890-91, 1,227 piculs.

ERGOT OF RYE.—The market is very firm for Spanish ergot; 1*s.* 8*d.* has been paid this week, and it is doubtful whether there is any more available at that price, 1*s.* 9*d.* being asked by most holders.

GALLS.—*China* galls declined 1*s.* per cwt. at Tuesday's auctions, when 142 cases sold "without reserve" at 51*s.* 6*d.* to 52*s.* per cwt. for ordinary partly broken quality.

CINCHONA.—The periodical auctions held on Tuesday were of very moderate extent. They consisted of:—

	Packages	Packages
Ceylon cinchona	926	of which 899 were sold
East Indian cinchona	352	" 327 "
Java cinchona	60	" 60 "
South American cinchona	340	" 82 "
W. C. African cinchona	60	" 60 "
	—	—
Total	1,733	" 1,428 "

Of the Eastern barks very little was bought in, and throughout the sales competition was well maintained, becoming more lively towards the end. The quality of the bark offered was poor. The market may be described as firm, but without quotable advance in value. The unit remains at 1*s.* per lb.

The following are the approximate quantities purchased by the principal buyers:—

	Lbs.
Agents for the Brunswick factory	90,392
" American and Italian works	59,643
" Mannheim and Amsterdam works	51,769
" Frankfort o/M. and Stuttgart works	49,521
Messrs. Howards & Sons	44,884
Agents for the Auerbach factory	30,650
Mr. Thomas Whiffen	5,350
Sundry druggists	12,977
	—
Total quantity sold	345,186
Bought in or withdrawn	40,005
	—
Total quantity offered	385,191

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it; firms who buy a small quantity of bark by weight frequently take the richest lots, and *vice versa*. The following prices are shown by an analysis of the catalogues to have been paid for sound bark:—

CEYLON BARK.—*Original*. Red varieties: Rather small and woody to good bright quilly branch chips, 1*¾d.* to 3*d.*; poor to fair stem chips, 1*½d.* to 3*d.*; ordinary to good bright shavings, 1*¾d.* to 3*¼d.*; dusty root, 2*d.* to 2*¾d.* per lb. Grey varieties: Very common and weak to poor branch quilly chips, 1*½d.* to 2*¾d.*; fair quilly stem chips, 3*d.*; good, but rather dusty, root, 4*d.* to 5*d.* per lb. Hybrid chips, 1*¾d.* to 2*d.* per lb. *Renewed*.—Red varieties: Fair quilly chips, 2*½d.* to 3*d.*; good bright ditto, 3*d.* to 4*d.* per lb. Fine bright spokeshavings, 4*½d.* to 5*d.*; thin and broken druggists' quill, 4*½d.* per lb. Grey varieties: Fair bright quilly branch and stem chips, 4*½d.* to 5*d.*; fair bright shavings, 5*½d.* to 6*d.* per lb. Hybrid chips, 3*d.* per lb.

EAST INDIAN BARK.—*Original*. Red varieties: Fairly bold strong druggists' quill, 6*d.*; fair to good quilly, but dusty, chips, 2*½d.* to 3*½d.*; mixed chips and shavings, 2*¾d.*; broken split quilly chips, 2*½d.*; dusty root, 3*d.* per lb. Yellow varieties: Thin woody and weak to good bright quilly chips, 2*½d.* to 5*½d.*; fine bright ditto, 7*d.* per lb.; ordinary to fine quilly branch chips, 2*d.* to 6*d.*; fair shavings, 2*¾d.* to 4*½d.*; good, but dusty, root, 4*d.* to 5*d.* per lb. Grey varieties: Ordinary dusty chips and shavings, 2*d.* to 3*½d.*; poor dull woody chips to good quilly ditto, 1*¾d.* to 3*d.*; fair root, 4*½d.* to 6*d.* per lb. Hybrid chips, 2*¾d.* to 3*d.* per lb. *Renewed*: Red varieties: Fair quilly mixed chips, 2*d.* to 3*½d.*; fair to good bright stem shavings, 3*½d.* to 4*½d.* per lb. Yellow quilly chips, 6*d.* to 7*d.*; fine shavings, 8*d.* per lb. Grey quilly chips, 3*½d.* per lb.

JAVA BARK.—Ledger stem quill realised 4*d.* to 4*½d.* per lb.; ground bark, 5*½d.*; branch chips, 3*½d.*; and root, 4*½d.* per lb.

AFRICAN WEST COAST BARK.—A parcel of 60 small packages of the red bark from the Portuguese Colonies on the West Coast of Africa was again offered to-day. The bark was all country-damaged, but it sold well, realising for medium thin broken rather dull quill, 4*d.*; and for quilly chips, from 2*½d.* to 3*½d.* per lb.

SOUTH AMERICAN BARK.—The stock of our old South American barks was drawn upon to the extent of 172 packages *Soft Colombian*, 3*½d.* ditto hard *Pitayo*, and 19 bales *Cyprea* bark, nearly all imported from eight to ten years ago. A small proportion only of this bark was sold:

Soft Colombian, at $1\frac{1}{4}$ d. to $1\frac{3}{4}$ d.; hard Pitayo, at $1\frac{1}{4}$ d. to $2\frac{1}{2}$ d.; and Cuprea at $1\frac{3}{4}$ d. per lb. Most of this was damaged. The remainder was held from $\frac{1}{2}$ d. to $\frac{1}{2}$ d. above the limits offered.

The following figures refer to the exports of cinchona bark from Java during the periods (eleven months) from July 1 to May 31 :

	1886-7	1887-8	1888-9	1889-90	1890-1
	lbs.	lbs.	lbs.	lbs.	lbs.
Private plantations, Amsterdam	1,431,245	2,563,210	3,124,314	4,221,042	6,032,495
Government plantations, Amsterdam ..	622,739	575,983	723,491	475,699	491,325
Total	2,054,044	3,129,193	3,947,845	4,696,741	6,523,820

GALLS (TURKEY).—The market is very firm, but quiet. Blues are quoted up to 60s.; greens at 50s. to 52s. 6d.; and white galls nominally at 47s. 6d. per cwt., but, as a matter of fact, none of this variety are offering.

GINGER.—Cochin has been in better demand with rather considerable sales up to 44s. per cwt. for C, 55s. for B, and 85s. per cwt. for A cut. At auction, however, the demand proved disappointing, and only 34 cases sold at 80s. for bold old cut (A), and down to 16s. for dust. About 200 barrels Jamaica sold at some decline; good bold bright 79s. to 81s.; medium to good washed, 52s. to 60s.; low mediums dull, 48s. to 49s.; common, 45s. to 47s. per cwt. In Liverpool new crop African ginger has been sold at 23s. per cwt. this week.

GLYCERINE.—The quotations for double distilled glycerines are still rising—the manufacturers' agents now quote 56s.; one of them even 60s. per ton for S. G. 1,260—but we think it would still be possible to get some at 54s. from second-hand owners. There is still a good deal of glycerine about which was bought cheaply at the recent bottom prices.

GUINEA GRAINS.—Small sales are reported from Liverpool at the high price of 43s. 6d. per cwt.

GUM ARABIC.—To-day's auctions were comparatively slight. A fairly steady tone prevailed, and a good proportion of the gums offered changed hands. Among East Indian gums *Ghatti* realised full to higher prices, the advance occasionally amounting to 3s. per cwt. *Kurachee Amrad* gum showed no alteration of any importance. Fine pinky sorts, for which 73s. to 75s. per cwt. was paid at the last gum-sales, sold at 73s. per cwt. to-day. The supply of exceptionally fine Amrad character gums from Kurachee has been a feature of our recent gum imports. *Cape* gums were very poorly represented. Low brown sorts sold at 19s. per cwt. There was a heavy drop in *Australian* gums, of which some unusually fine pale frosted parcels were offered. These realised only 50s. per cwt., showing a fall in value of 5s. to 10s. per cwt. Common Australian sold at par to 2s. 6d. decline. *Aden* gums, all except the commonest grades, are practically unsaleable. From Trieste about 6 cwt. of Turkey gum, described as fine bold pale picked genuine *Soudan* gum is being offered at 23s. 10s. per cwt., and small yellowish picked grains at 13s. 10s. In Liverpool *Kordofan* sorts may be had as low as 7s. per cwt.

GUM ELEMI.—The *Brindisi* will shortly be due with a consignment of 29 cases gum elemi from Manilla.

GUM OLIBANUM.—The supply offered for sale at to-day's auctions was nearly all bought in.

GUM TRAGACANTH.—A sluggish market, and without special feature since the last auction sales, when seconds and thirds were neglected, while common varieties were in good request at an advance of fully 2s. 6d. per cwt.

HONEY.—A parcel of 15 kegs of fine white hard *Chilian* honey is reported to have been sold this week at 44s. per cwt., which indicates a better market. Higher prices are anticipated. In Liverpool the demand has also improved, and sales are imported of *Californian* honey at 38s. to 42s. 6d. per cwt.

IFPECACUANHA.—There has been an arrival of 90 packages by the *Elbe* from Buenos Aires this week. This is an unusually heavy consignment.

NUX VOMICA.—The market remains firm. Arrivals from Coconada and Colombo this week amount to 296 cases.

OIL (COD-LIVER).—The market is firm and active. On the spot 80s. per barrel is the nearest quotation for 1891 non-congealing Norwegian oil, and 70s. to 75s. for old oil. Sales are reported of both varieties.

OILS (ESSENTIAL).—*Star anise* maintains the recent small improvement, and is quoted at 6s. 3d. to 6s. $3\frac{1}{2}$ d. per lb. on the spot, which is still low as compared with the e.i.f. quotation. Tonquin star-anise oil is offering at 5s. 10d. per lb. c.i.f. terms. American oil of *Peppermint* (I.G.H.) keeps firm at the recent advance in price. To-day's quotation is 13s. 6d. per lb., but perhaps 13s. 4d. might find acceptance. *Otto of rose*: The price for the new season's oil has not yet been fixed; and, in the meantime, the agents here are without reliable quotations. There is an impression that the prices may possibly be higher than those of last season.

OIL (OLIVE).—The market is exceedingly languid, in spite of the fact that our stock is an unusually small one. *Mogadore* oil is nominally quoted at 38s. 6d. per cwt., but it would be impossible to effect sales at that figure. *Spanish* oil is nominally held for 42s. to 43s. per cwt. The market for *Eating* oils is steady, but quiet—*Baii* oil at 4s. 6d., *Florence* (Lucca) up to 6s. per gallon.

OPIUM.—The London market is quiet, and very little business has transpired. The holders of fine opium have, however, raised their limit somewhat; while in old shipping opium little business has been done at from 8s. to 10s., according to quality. In *Persian* opium no business is reported. Writing on July 15, a Smyrna correspondent states that the purchases for America and English account still keep prices up, but that with the positive certainty of a large crop, and in view of the heavy arrivals of new opium (650 baskets against 145 in 1890), any cessation in the buying would at once have the effect of causing a collapse in the market. Our *Salonica* correspondent, writing on July 19, reports as follows:—"During the past week business on our market has been exceedingly active, with large arrivals from the interior, especially in good and fine qualities. Manufacturing opium is certain to be in larger supply this season than during the 1890 campaign. So far the prices paid—130 to 137 piastres for fine, and 115 to 122 piastres for good quality—are much in excess of the quotations warranted by the state of the crop and the tone of the importing markets. Speculators are already beginning to take up the article, and it is quite possible that the prices may be further inflated by them. The principal cause of this lively aspect of the market lies in the arrival of orders from America. It is not likely that opium consignments will be sent to London as they have been in former years, when the results were not encouraging. Hence our dealers propose to sell on the spot, and the time seems close at hand when the consumers will purchase the whole of their requirements in *Salonica* opium direct from our merchants. The stock on our market may be estimated at 6,000 lbs. of fine and 4,000 lbs. of secondary quality. Twenty cases, the first arrival of new opium, have been shipped to New York."

PHOSPHORUS.—Has declined in price to 1s. $4\frac{1}{2}$ d. per lb. for wedges, and 1s. 5d. per lb. for sticks. Amorphous phosphorus is held for 2s. 2d. per lb.

POTASSIUM PERMANGANATE.—As a result of the improved demand which generally occurs during the summer, prices have slightly advanced. Small crystals, which were offering at 57s. 6d. to 58s. per cwt., are not obtainable now below 60s. per cwt. spot, or 59s. per cwt. f.o.b. Continental port. Large crystals 5s. extra.

QUICKSILVER.—This metal remains quiet at 7s. 15s. per bottle all round.

QUININE.—The market was dull during the early part of the week, and 5,000 oz. *Auerbach* quinine changed hands at 10s. 7d. per oz. Since Wednesday the market shows some inclination towards a recovery, and some 6,000 ozs. German bulk (B. & S. or *Brunswick*) from second-hand holders have been sold at 10s. $1\frac{1}{2}$ d. per oz. *Howard's* brand was reduced in price—1d. per oz.—by the manufacturers on Wednesday, vials being now quoted at 1s. $3\frac{1}{2}$ d. to 1s. 4d. per oz., according to quantity.

ROSE LEAVES.—Dutch rose leaves are now being offered, and were at first held at the high price of 3s. 6d. per lb.; since then, however, offers are being solicited at 2s. 9d. French leaves are also on the market at from 1s. 9d. to 2s. for fair to good quality.

SAFFRON.—There is no reliable news yet concerning the prospects of the coming crop: holders in Spain are asking rather higher prices, but there is no demand on this side good to fine Valencia saffron is held for 34s. 6d. to 38s., sound Alicante at 26s. 6d.

SCAMMONY.—Under date of July 15 we hear from Smyrna that the arrivals of new crop scammony had commenced. The market was weak, and prices ranged from 21s. to 23s. 3d. per lb. for first and superior, to 14s. and 16s. 6d. for thirds and seconds.

SENEGA.—As is usually the case with the arrival of the new crops, the market is decidedly easier. Good new root is now offering at 1s. 6d. per lb. c.i.f. terms, but might be bought for still less money in large quantities.

SHELLAC.—The market opened with a firm tone this week. At the auctions 1,040 cases were offered, of which 1,020 sold at an advance of 3s. on *Orange* and *Garnet*, and 1s. to 2s. on *Button* lac. The following prices were paid:—*Orange*: Fine unworked, 88s. to 89s.; fair reddish, partly cakey, unworked, 85s. to 87s.; fair red worked, 85s. to 86s.; ordinary livery, 83s. to 84s. per cwt. *Garnet*: AC fair worked, 86s.; blocky unworked, 83s. to 85s. *Button*: Good blocky to fine first, 89s. to 93s.; fair ditto, 87s. to 89s.; good blocky second, 86s. to 87s. per cwt. To-day the market is not so firm as yesterday, and no transactions have transpired. *Garnet* lac is exceedingly scarce, and from 84s. to 86s. per cwt. is required for un-worked AC. *Orange* TN on the spot is obtainable at 87s., while for August delivery 89s. 6d. for September 90s., and for October 92s. per cwt. is the quotation. No auctions will be held next week. Since the auctions the market has been very firm.

SODA NITRATE.—The market for high-strength nitrate of soda for manufacturing purposes is advancing in consequence of the extreme paucity of supplies of that variety. One or two consignments only are said to be afloat, and these have been strongly competed for by buyers.

STROPHANTHUS.—There has been an arrival of 316 lbs. of green Kombé seed; the quality, however, is said to be rather below the average. Only a nominal price is named for this product at present.

TEA—A heavy sale of Congous, new and old, last Tuesday proved rather too much for an already weak market, and prices showed a sharp decline all round. Sweet, useful 1890-1 Kaisow sold at 5½d. and 5¾d., and N.S. 1891-2 Saryune realised no better price than 6½d. to 6¾d., while really good N.S. Moning, at 6½d. to 6¾d., was remarkably cheap. Buyers of China teas, having mostly suffered on their old stock, are very chary of buying new teas, and, with very little encouragement from the country, are wisely determined to get prices down to a level which will force the teas into consumption and make them safe stock. Scented Capers are quiet, good tea being obtainable at 9d., and really fine teas from 11d. to 1s. Assams and Ceylons are a weak market, and, while Ceylons are cheap enough under 9d., the general feeling is that Assams must be kept down to a low figure, and, as in the case of China teas, buyers are not yet free enough of old-bought stock to be very disposed to operate freely in new crop. There is, however, a fairly good business, for the time of year, being done in Ceylons from 8d. to 10d., and the few lots of good 1890-1 Assam that have been smashed out in sale have been sold readily enough in the country at the reduced prices.

THE SMYRNA OPIUM MARKET. (*Telegram from our Correspondent.*)

SMYRNA, July 29.

THERE has just been an advance equal to 2d. per lb. on all grades of opium in this market. It is occasioned by the fact that speculators who had made bear sales have been compelled to purchase in order to fulfil their engagements.

CHEMICALS IN THE NORTH OF ENGLAND.

THE market for heavy chemicals continues very steady, the principal change being in bleaching-powder which, to the surprise of many in the trade, was advanced last week by the United Alkali Co. They also announce that all sales of bleach on their account, for the American market, will in future be made through one firm, viz., Messrs. Riker & Co., of New York.

On Tyneside the chief topic of conversation has been the terrible disaster and loss of life at the United Alkali Co.'s Chemical Works at Friars Goose. Production of chemicals for the present has been interfered with; but it is reported that the works will be restarted as soon as possible. From the extent of damage done to the plant, it is likely that the chemical market will, for some time, have to do without the production of these works.

BICARBONATE OF SODA continues to be quoted from 6l. 15s. to 7l. per ton, less 2½ per cent. discount, in 1-cwt. kegs, f.o.b. Liverpool.

BLEACHING-POWDER advanced to 7l. 5s. per ton for soft-wood, and 7l. 10s. per ton for hardwood casks, net cash, f.o.b. Tyne. Form Liverpool, softwood casks are quoted 7l. 2s. 6d. per ton on rails, Widnes and St. Helens, and 7l. 5s. per ton f.o.b. Liverpool; hardwood casks quoted 8l. per ton, all net cash.

CAUSTIC SODA firmer, without any change in prices:—12l. 5s. per ton for 77-per-cent., and 11l. per ton for 70-per-cent., net cash, f.o.b. Tyne; 74-per-cent. quoted 11l. 15s. per ton; 70-per-cent., 10l. 15s. per ton; and 60-per-cent., 9l. 10s. per ton; 60-62-per-cent., cream, 9l. 5s. per ton, all net cash, f.o.b. Liverpool.

CHLORATE OF POTASH quiet, at 5½d. per lb., less 6 per cent., f.o.b. Tyne, and 5¾d. per lb., less 5 per cent., f.o.b. Liverpool.

SODA ASH quiet, at 1¾d. per degree, less 4 per cent., for 48-56-per-cent. carbonated, f.o.b. Tyne. Liverpool caustic, 48-per-cent., 5l. 2s. 6d. per ton, and 52-per-cent. 5l. 11s. 3d. per ton; carbonated, 48-per-cent., 5l. 7s. 6d. per ton; 52-per-cent., 5l. 16s. 3d. per ton; and 58-per-cent., 6l. 10s. per ton, f.o.b. Liverpool.

SODA CRYSTALS firm, at 2l. 15s. 6d. per ton for casks, gross weight, and 2l. 15s. 6d. per ton for 2-cwt. bags, net weight, f.o.b. Tyne; packed in 3-cwt. barrels, price is 3l. 5s. to 3l. 10s. per ton, net weight, f.o.b. Liverpool.

SULPHATE OF COPPER firm for prompt with a little-easiness in prices for forward delivery: prompt quoted 15l. 10s. to 15l. 15s. per ton, and forward 15l. 10s. to 16l. 10s., quoted f.o.b. Liverpool.

SULPHATE OF SODA steady, at 40s. per ton in bulk, and 50s. per ton, ground and packed in casks, f.o.b. Tyne. In bulk, free on rails, Widnes and St. Helens, nominal price is 40s. to 45s. per ton.

“ Of all the deadly things that war
Against our peace and kill us,
The worst and deadliest by far—

As proved by the researches of scientific men in Germany, France, and several towns in Michigan, who have made the matter a study, and found out by experimenting on guinea-pigs and other cheap-animals how to cure almost anything but warts and catarrh—

Is merely a bacillus.—*Chicago Tribune*.

THE BLEACHING OF RED NOSES is, it appears, a very prosperous business in America. There is an individual in this way of trade at Brooklyn who advertises “Red noses bleached while you wait. Permanent and sure.” He steeps the nose in hot water, after which he applies a thick plaster of paste, made of common wheat flour and water. This process has to be repeated daily for a certain period; but, as a rule, at the expiration of a week the nose loses its purple or flame-coloured hue, and becomes “pink and healthy.” A few more days, and it is perfectly white—unless, perchance, its owner has been dipping too long into glasses, in which case the cure takes a little longer.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinct nom-de-plume.

Write on one side of the paper only: and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

The Scarcity of Assistants.

SIR,—Your correspondent, "An Overworked Assistant," has evidently had the misfortune to drop on some of the worst situations to be had in the trade, though anyone with a fair experience of retail chemists must agree with him as to the long—painfully long—hours, and the miserable salaries which assistants have to put up with—and are supposed to live upon. I say supposed to live, as in many cases which I have known bare existence was hardly possible. I have in mind the case of a friend of mine a year or so ago being offered the magnificent sum of 30s. a week to manage a branch shop in London, the hours being from 8 A.M. until 11 P.M. and 12 o'clock Saturdays, an evening a week, and off duty of a Sunday when it could be arranged. This offer was made to a married man, who, I am glad to say, was able to refuse any such ill-paid slavery. It may be that your correspondent has had experience of some employers as benevolent-minded as the above; if so, a bus-driver's life and wages would naturally appear a most desirable exchange.

I have, in my time, had several years' experience in London as assistant; but, barring the excessively long hours and poor remuneration, have had no cause whatever to grumble at the living when indoors. It has always appeared to me that, however small the salary paid, chemists as a rule live well, and are not mean as far as food goes. I should say that, where anyone has reasonable cause of complaint, it is his own fault if he cannot raise sufficient energy to get into something better.

The scarcity of assistants I believe to be owing to the greater inducements held out to decent men by the large stores and co-operative companies both as to short hours—from nine till six generally—and better wages, a minor man being started at 2*l.* a week, and in some cases more, as dispenser, and ordinary counter hands from 30s. to 35s., these latter in the best stores in London being generally young men studying for their examination, to whom the short hours and fair salary offer great advantages over ordinary retail shop life.

There are two sides to every question, and to be just and fair I cannot see how retail chemists about London can really afford to pay their assistants as well, and give them the same hours, &c., as the large stores, which have nearly monopolised the business and reduced the profits to the lowest limits, thereby leaving the chemist little for himself and less for those whom he may employ; but there are many good retail businesses still left which can afford to treat assistants fairly and considerately.

THE SUMMER BIRD. (92/6.)

SIR,—I have read with much interest the various flickering attempts of several of your correspondents to raise the vexed question of assistants' wrongs, and, having taken an active part in an organisation started a few years ago to better the assistant and give him some sort of an idea of the character of his future employer, I always welcome all such discussions with pleasure.

Everyone connected with the trade is aware of the almost criminal apathy and indifference with which the ordinary assistant looks after his rights, and the resigned way in

which he will accept miserable situations of 50*l.* a year, with bad feeding, worse lodging, a life of perpetual work, and the irresistible advantages of "an evening off per week."

By combination assistants might make the outdoor system almost universal, for it is a recognised fact that indoor situations are the cause of the whole trouble. They could obtain shorter hours, and the average wage of a bricklayer or carpenter would no longer be coveted as a "princely salary" by the aspiring ones of the trade. As for the great scarcity of which we have heard so much lately, it does not tally with my experience.

I think that it is in getting employers willing to give adequate remuneration for labour and more leisure to their employés that the "great scarcity" comes in. They raise their eyebrows in astonishment when an assistant expects more than 60*l.* a year indoors, or to finish work before 9 o'clock at night. As an aspiring chairman of the Pharmaceutical Society was heard to say to an assistant recently, who asked 65*l.* and an afternoon a week, "We are not in the habit of receiving such preposterous demands from assistants, and will have to learn a little more before we entertain such an idea."

If assistants would only rouse themselves a little from the lethargy into which they have fallen, and communicate with each other, so that a gigantic combination might be formed, I feel sure such a scheme would meet with success, and would go a far way towards making the assistant's life less of an existence, and more of a pleasure.

Yours, &c.,

Liverpool, July 29.

ORIG. CANTH. (92/28.)

E. C. A. (87/57) is a junior. He finds the hours exceedingly oppressive, and thinks that this is the root of the evil.

Raspberry-vinegar.

SIR,—The following recipe may prove useful to "Nemo," and will be found to be the easiest and most economical way to prepare raspberry-vinegar.

It may be prepared and put up as a concentrated extract, in 4-ounce bottles, or in quarts, as raspberry-vinegar, as desired, to suit customers.

It has a ready sale here in the extract form, and provides a most delicious beverage.

Essence of raspberry	..	..	..	1 oz.
Tincture of capsicum (B.P.)	..	..	..	2 drachms
Liquid cochineal (Martindale)	..	..	3	"
Acetic acid (B.P.), add to	..	..	..	4 oz.

Mix.

Sig.: Concentrated extract of raspberry-vinegar.

Make a syrup as follows, with:—

Loaf sugar	..	..	..	..	4 lbs.
Water	..	..	..	..	5 quart bts. (i.e. 125 oz.)

Boil, strain; when cold, add the extract as above, and bottle for use.

If genuine essence of raspberry cannot be procured, it may be made artificially, thus (though the flavour is not quite so good):—

Oz.					
Orris-root (bruised)	..	..	..	..	4
Rect. spt. wine	..	..	..	..	10
Water	..	..	..	..	6
Macerate seven days, and filter; add—					
Sacch. ust. q.s.	..	..	..	..	..
					to colour

39 Eglinton Street, Glasgow,

JAMES BRUCE.

July 26.

Whitworth Red Bottle.

SIR,—In your issue of March 28, pages 452-3, you give various formulae for "Red Bottle" (Whitworth).

During my connection with the trade in Manchester and the North of Derbyshire, the following form was always used when asked for "Whitworth Bottle":—

OL. origani	..	..	..	..	..	3 <i>fl.</i>
Camphor	..	..	..	..	..	5 <i>iv.</i>
Tr. camph. co.	..	..	..	..	..	5 <i>ii.</i>
S.V.R.	..	..	..	..	..	5 <i>iv.</i>

Methylated spirit was never substituted for S.V.R., nor was any variation made when required for external use only. I may add that it is highly valued in the districts where I have introduced it in this country.

Auckland, N.Z.
June 1.

Faithfully yours,
R. SPENCER.

Sale of Carbolic Acid.

Nemo (83/22) suggests that we should print off extra slips containing reports of cases of carbolic acid sold by grocers and others leading to fatal results, and supply these to chemists, with a view of checking such trade.

Prescriptions Accurately Prepared.

SIR,—I have been with the man to whom "Veritas" refers, and must say that the statements made by "Veritas" are perfectly correct, and that I could even go further, and make a few additions to his letter; but, as some of your correspondents seem to have much more than they can swallow as it is, I will reserve it for the future.

Yours truly,
July 27. JUSTITIA. (263/31.)

Cash and Credit Prices.

MR. J. G. DICKINSON (Keighley) asks for information as to the custom of charging for patents and proprietary articles to customers who take credit. He has adopted a method of charging at reduced prices for cash, and at full prices for credit, allowing over $7\frac{1}{2}$ per cent. on accounts paid monthly, 5 per cent. on accounts paid quarterly, and $2\frac{1}{2}$ per cent. on accounts paid half-yearly. A customer taking a year's credit has to pay in full. This system is all set forth in a circular, but Mr. Dickinson finds that it involves continuous argument. He asks for advice and experience.

Dragon's Blood.

SIR,—In answer to a recent query as to the supposed "charm" excised by dragon's blood, I beg to say that women buy dragon's blood (the lump preferred) to excite love in men. They usually burn it at noon by placing it on a shovel over a fire.

ANOTHER YORKSHIRE BITE. (111/16.)

Summer Specialities.

SIR,—The contribution to the Summer Issue by Mr. Boa, of Edinburgh, is of the utmost importance in these times, when proprietaries are "cut" and sold by any shopkeeper.

To "go in" for this sort of thing has caused some of the trade a rude shock, but there cannot be a doubt but what it pays. It also is a desirable means of keeping all and sundry about a shop fully occupied, and experience has shown that the public with whom one is accustomed to deal ultimately prefer this or that of "your own make."

I think it very desirable that the stamping of articles should be steered clear of, and too full directions for use should be avoided; for it must always be borne in mind that the prescribing physician's feelings have to be considered.

Mr. Boa deserves the cordial thanks of the entire trade. I have myself said as much to many friends, but hesitated to put my opinions upon record.

Will some correspondent further favour us with a recipe or two for *pot pourri* for preserving rose-leaves?

Yours, &c.,
GRATEFUL. (90/45.)

Irish Rennets.

SIR,—Will you, in the interests of the retail trade, permit us to give a warning? Chemists who purchase Irish vells are sometimes, in the warm weather, complained to by their customers that the vells have not been efficacious in curdling cheese. In nine cases out of ten this is because the vells have been allowed to get too dry, and, perhaps, have been exposed to heat and kept without brine. On one

occasion a customer wrote to us, saying: "The vells you sent are no good to me; customers have returned some, saying they are worthless for cheese-making."

We responded that we would send him some brine-liquor, and if, after soaking them in it for three weeks, he still found them not efficacious, we would take them back with pleasure. Those vells were never returned to us.

In about a week's time our customer wrote saying they presented a very different appearance, and eventually he sold them all, and ordered more.

Yours truly,
Bristol, July 23. WHOLESALE DRUGGISTS. (91/62.)

MISCELLANEOUS INQUIRIES.

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

86/25. A. P. S.—The best Tripoli is of a fawn colour, and deposits of it are found which require no preparation further than sifting. We can find no description of machinery employed in its manufacture. The market value of tripoli, as imported, is about 12*l.* per ton. Crocus is not tripoli, nor is rotten-stone. Genuine tripoli is not a common thing. We have paid as much as 3*s.* per lb. for it. We prefer to give the best practical information, but you seem to be unaware that on some subjects the practical knowledge is only possessed by individuals who never think of parting with it except for a substantial monetary consideration. If any of those who read this can assist you, we shall give publicity to the information which they send us.

257/35. P. W.—Prescription directions are rarely written in Latin nowadays.

87/27. Non Certus.—We cannot advise in such cases.

82/9. B. H. A.—Fluid Extract of Cascara Sagrada, Palatable:

	Parts
Cascarasagrada (40 powder)	100
Magnes. calc.	1
Spt. vini rect.	100
Aq. q.s.	

Mix the alcohol with the water in the proportion of 2 to 3 of water; moisten the mixed powders thoroughly with the menstruum, and let it stand until the bitterness disappears; then pack in percolator and percolate, adding more water, if necessary, until 200 parts extract is obtained. You may sweeten with glycerine and flavour with any aromatics to taste.

31/7. E. S. V.—Russian Tallow is a commercial article, the quotation for the standard brand P.Y.C. ("St. Petersburg Yellow Candle") being at present 39*s.* 9*d.* to 40*s.* per cwt. You ought to be able to obtain genuine Russian tallow from any of the wholesale firms dealing in oils and drysalteries whose advertisements you will find in this journal.

89/29. W. W.—Solution of carbonate of ammonia for dispensing is generally made 1 part in 8. It keeps well. You must use distilled water.

89/25. W. M.—The yellow-flowering plant is *Gallium eruciatum*, or *Crosswort*; the other pinkish flower one of the *Malvaceæ*, but the sample is not sufficient for identification.

90/68. A. M.—You will find all information regarding the microscopy of bacteria in Dr. Sims Woodhead's new book, "Bacteria" (Walter Scott, 3*s.* 6*d.*).

89/25. *Graham—White Oils* (DIARY, 1890).—We can neither understand your difficulties nor your arithmetic. You are not bound to follow the directions to the letter—some people get a satisfactory product by doing so, others by varying it. You should have no difficulty in obtaining a satisfactory, simple, and efficacious liniment if you omit the spirit and the eggs, so that your formula will stand:—

	oz.
Soft soap	6
Turpentine	20
Strong ammonia	5
Camphor	6
Seed oil	8
Oil of amber	4
Water to	80

Rub the soap with 10 oz. of water, dissolve the camphor in the turpentine, &c., and add the ammonia last.

We do not understand what you mean by a solid one. Kindly explain.

88/67. *W. W.* tells us that by following the advice given in a previous issue—viz., adding powdered soap and liquorice powder—he has succeeded in preventing pills containing colocynth, blue pill, hyoscyamus, and peppermint oil from falling. He now finds when using French chalk to finish they become a nasty green colour; they also pit on standing. Use starch powder or lycopodium to finish, and add a little tragacanth powder to prevent the pitting. You should consult "Art of Dispensing" for full particulars concerning the every-day difficulties of the dispensing-counter.

89/44. *Tartar.*—Glycerine of Borax contains free boric acid. Glycerine, in common with other polyhydric alcohols, splits up borax into a neutral borate and the free acid. The matter is fully explained in "The Art of Dispensing."

79/61. *R. H. S.* wants to know the process for *Iso-chromatising Dry-plates* by means of eosin or erythrosin, added to methyl-violet, with exact quantities for same. The combination of methyl-violet with eosin or erythrosin is not upheld either by theory or practice; methyl-violet sensitises slightly for orange and red, but not so well as chlorcyanin, and the violet is liable to cause fog, the general sensitiveness of the plates is lowered, and the colour sensitiveness is poor. Make up two stock solutions:—

1.—*Methyl-violet Stock Solution.*

	Parts
Methyl-violet	1
Distilled water	1,000

2.—*Eosin or Erythrosin Stock Solution.*

	Parts
Erythrosin or eosin	1
Distilled water	1,000

Soak the plates to be sensitised for two minutes in a "vorbad":—

	Parts
Solution of ammonia, 830	2
Distilled water	200

Let the plate drain well, and then immerse in colour-sensitising bath:—

	Parts
Methyl-violet solution, No. 1	25
Erythrosin, No. 2	25
Solution of ammonia, 830	4
Distilled water	175

Allow the plates to remain in this for $1\frac{1}{4}$ minute, then remove, drain, and finally dry in absolute darkness. About 3 oz. of the above bath will sensitise about $1\frac{1}{2}$ dozen plates, and about 10 drops of ammonia solution should be added after six have been dipped. The dish must be kept covered whilst sensitising the plates, and a very deep ruby light used, and not too much even of that. This process gives inferior results to those obtained by the use of erythrosin silver. If information is forwarded as to the particular colour it is desired to photograph, and whether a pigment or

spectrum colour, more accurate information could be given. The application of eosin, erythrosin, or any of the eosin group of dyes, in conjunction with an alkali, to gelatine dry-plates is protected by a patent, and a licence has to be obtained from the English workers of the process for leave to use the same.

86/56. *Salad.*—*Salad-dressing.*—See June 27, 1891, page 902. You might get useful hints in "Salads and Sandwiches" (T. Herbert), published a week or so since (Sampson Low).

88/32. *Glare* wishes to know the best and brightest Colour for Carboy-show in side window. See last week's issue, page 164. Cobalt pink is one of the prettiest and most permanent colours we know, but bothersome to make. Aniline colours are bright, but not durable.

88/66. *G. B.* has a difficulty in Curing Otter-skins, especially the thick parts of the head, the nostrils, &c. Try arsenical soap (soft-soap, arsenic, and lime, with a little powdered camphor). It is very useful for thick, greasy skins.

89/22. *G. C.*—The old farmers Specific for Piles seems to consist of oil of amber 1 part, almond oil 2 parts. The green colour is a vegetable one. Use oleum viride sufficient to give the desired shade.

88/9. *Rhodium.*—A preparation of rhubarb that can be used for making Syrup of Rhubarb may be made by taking double B.P. quantities of rhubarb and coriander; use maceration and percolation, evaporate to 6 oz. instead of 14 oz., add 1 oz. of spirit, and filter. One part of this liquor, rheo to seven of syrup will give you a preparation similar in flavour and strength to the B.P.

87/51. *Oxymel*—Your Liniment for Stiffness and Rheumatism is the useful soft soap, camphor, opium, and ammonia combination. For a similar article, both cheap and useful, use:—

Soft soap	12 oz.
Camphor	6 "
Strong ammonia	4 "
Rosemary oil	1 "
Methylated spirit	3 pints
Water	1 "

M.

To this add the residual marc from 4 pints of tincture of opium; macerate seven days, and filter.

90/48. *Pot. Permang.* has a customer who uses permanganate of potash as a hair dye, but she finds the colour fades in three or four days; while in France she was supplied with a colourless solution, which fixed it for a longer time. A solution of glycerine 1 part, in rose water 7 parts, used as an ordinary dressing, will fix the permanganate.

90/66. *Athluan.*—Your powder is a mixture of black antimony, 2 parts; sulphur, 1 part; nitre, 1 part; and fennugreek, 4 parts.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

87/69. A reliable work upon the manufacture of fiddle-string?

89/22. Name of makers of natural undyed wool-felt?

89/25. Maker's name, or composition, of compressed pellets for wheyed milk, used by farmers?

Experience in stock-taking of sponges, smelling-bottles, and tanks of oil; by one who is very sorry to see that remarks upon stocktaking have finished so suddenly.

Crude drugs, without greatly differing in physical character, may contain widely different quantities of alkaloids, consequently Tinctures made from such drugs must necessarily vary considerably in strength. Tinctures made from Standardised Drugs, owing to different methods of manufacture, also vary considerably in strength, hence the necessity for standardising the finished product.

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We intend selling it in BULK ONLY, at 1s. 3d. per lb., the smallest quantity at Wholesale Terms being 4½ lbs. Our usual Discount given. Special Terms for larger quantities.

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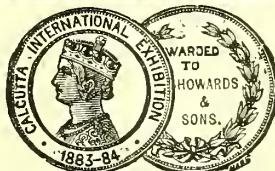
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Contains pure Bismuth and *Pepina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., $\frac{1}{2}$ lb., and 1 lb. bottles.

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A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical enquiry. Dose: Ten to sixty drops.

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Fluid pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is guaranteed to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the foetid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes for dispensing at a cheaper rate.

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Each drachm contains in a concentrated form, besides the fluid pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In $\frac{1}{2}$ lb. and 1 lb. bottles.

N.B.—*Peps. Liq. c. Bismutho Co.* contains, in addition, one gr. soluble Euonymin in each drachm.

SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euonymin. Dose: One drachm. For dispensing $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

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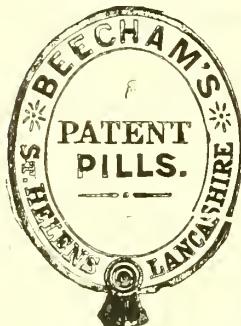
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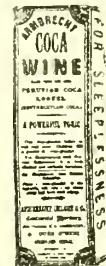
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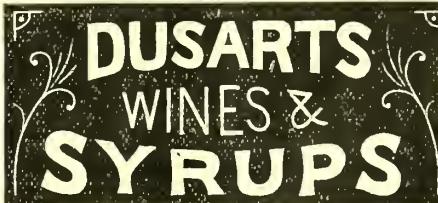
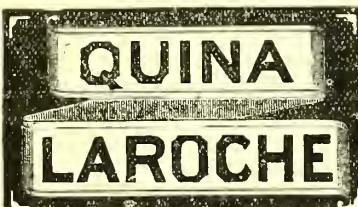
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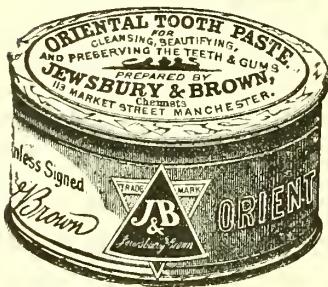
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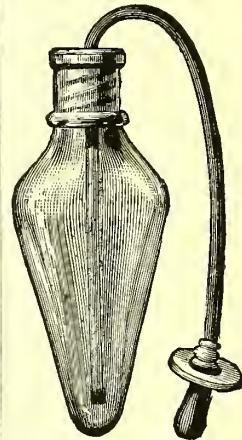


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651.—White Flint Bottles, with glass screw stoppers, black fittings, per gross **£2 2 0**

653.—White Flint Bottles, with glass screw stoppers, seamless teat, best black tubing, glass valve tube, with tube and bottle brushes, each in handsome labelled cardboard box, per dozen **£0 6 0**

We would especially invite the attention of the Trade to the fact that WE HAVE NOT ADVANCED the prices of our popular "Standard" Feeders, and are still able to receive and execute orders as above.

ALL THE ABOVE PRICES SUBJECT TO OUR USUAL DISCOUNT.

Customers' Names and Addresses FREE OF CHARGE for orders of Two Gross at one time.

THOMPSON, WALTERS, HOLE & CO., LIM.
CURTAIN ROAD, LONDON, E.C.

A RARE CHANCE

DON'T LOSE IT.

Having decided to discontinue that branch of the business embracing Cut Glass, Toilet, China Bottles and Odorators, and to pay more attention to A1 Brand Preparations, Manufactured Goods, and The Babies' Feeding Bottle Co., I have determined to dispose of my Stock of above class of goods at exceptional Prices, quite 15 per cent. below the usual; and as my prices in these goods to start with have been far lower than others supply at, you will get

A BARGAIN SUCH AS IS SELDOM MET WITH

which every thinking and wide-awake Chemist will take advantage of, and even if already stocked, hold for future trade.

YOU HAVE ALL THE SUMMER BEFORE YOU,

and it would be *unwise* for any to pass such an opportunity. The Goods are not rubbish, but comprise very best patterns and styles.

Buyers can, of course, call and choose their own patterns, but the majority being unable to do so, Special Parcels, comprising a first-class assortment of either Cut Glass or China Bottles, Toilet Bottles, or Odorators, or of these Goods assorted, have been arranged as follows:

Letter A stands for Cut-glass Smelling Bottles. Letter B for China Bottles with Nickel Caps. Letter C for Toilet Bottles. Letter D for Odorators.

Parcel 1.—£1.—23/ worth of either A, B, C, or D; or of A, B, C, and D assorted.
" 2.—£2.—47/6
" 3.—£3.—71/
" 4.—£4.—94/
" 5.—£5.—117/

Postal Order or Cheque must accompany order, and to save all trouble an Order Form is given below, which can be filled up and sent.

Having bought these Goods at very lowest prices possible, Wholesale Buyers and Shippers, as well as Retail, would find it to their advantage to consider the above. Special arrangements made with Buyers of £20 or £30 worth.

To Mr. A. W. SHIRLEY, 55 Farringdon Road, E.C.

1891.

Please send Parcel	Assortment	SPECIAL REMARKS	Forward per
			or enclose to
"	"	"	
"	"	"	
"	"	"	
"	"	"	
For which is enclosed		for £	
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SOMETHING QUITE NEW IN CHINA! Nickel Cap done away with.

FOR SALTS AND PERFUMERY. PATENT APPLIED FOR.



No. 303	...	6/- dec.
" 305	...	5/- "
" 306	...	7/- "
" 307	...	4/6 "
" 304	...	7/- "



Put up, assorted,
1 dozen in glass lift-
up lid case,
6/- dozen.

ORDER EARLY.



The great disadvantage of China Bottles for Smelling Salts has been that the ammonia acted upon the nickel, turning it green—in fact, rotting it—and if wanted for Salts they had to be mounted in Silver, making them too expensive for ordinary use. The cap of these new bottles is made of China, with a peg of China inside, surrounded by cork, so that the difficulty of using Fancy Bottles for Smelling Salts is now overcome, and a most Charming Article is presented at a ready selling price.

* Above Special Offer of Parcels of Bottles at reduced prices does not apply to the New China Goods.

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Is the most saleable Fly Paper ever introduced. It is non-poisonous, and the enormous annual increase in the sale of it is positive proof of its popularity. Many Chemists sold more "Fly Cemeteries" last year than they ever did in their lives of all the other fly papers put together.

*Samples, Testimonials, and Price on application to
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Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.



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THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings, and relaxed tendons in Horses. For pain after calving and lambing, and for swollen noddles and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

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Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellow, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

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THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

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Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

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For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

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These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

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The great and reliable remedy for Husk or Hoese in Cattle, Heifers Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs

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Cures Scour in all Young Stock.

Price 1/8 per Bottle,
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Instantly relieves Bowel Cattle and Sheep.
For Debility, Chills, and Low Condition.

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Cures Fever and Costiveness in Cattle.
Cleanses and Cools the Blood and System.
For Red Water, Indigestion, and Yellows.
Cures Bad Cleansing and prevents Milk Fever.

Price 12/- per dozen packets.
The "EWE DRENCH" acts as above for Sheep,
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Price 2/6 and 6/- per bottle.

THE WHITE OILS.

Unrivalled as a Safe Embrocation.
For Sprains, Swellings, Windgalls.
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For Cursts and Plaits when forming.

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For Wounds of all kinds in all Animals.
For Saddle and Stake Wounds and Cracked Heels.
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For Disorders of HORSES, CATTLE, and SHEEP.
Price, complete with Guide, "Everyday Farriery," £2 4s. and £5.
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Arranged specially for Disorders in HORSES.
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For destroying Weeds, Moss, &c., on Garden Walks, Carriage Drives, Roads, &c.

We desire to point out the special advantages which the sale of our "Acme" Weed Killer affords the Trade.

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SALEABLE PREPARATION FOR CHEMISTS.

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WEED EXTERMINATOR.

FOR GARDEN WALKS AND CARRIAGE DRIVES.

IN 1, 2, 4, 8 & 12 GALLON DRUMS.

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Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

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Yours faithfully, JOSH. N. CUTTS, B.Sc., F.C.S.

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SPECIALITY FOR PERFUMERY.

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Jars, 2-gallon, 2/6; 3-gallon, 3/; 4-gallon, 4/.
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AT LOWEST PRICES.

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Makers of EVERY DESCRIPTION of Glass Bottles, either PLAIN or STOPPED, in
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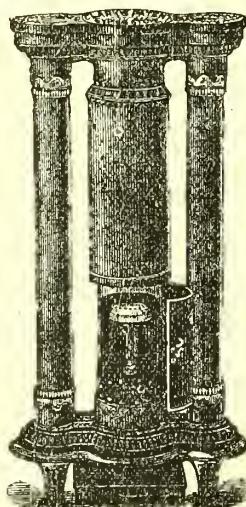
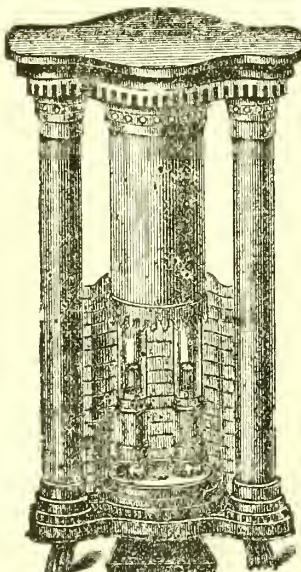
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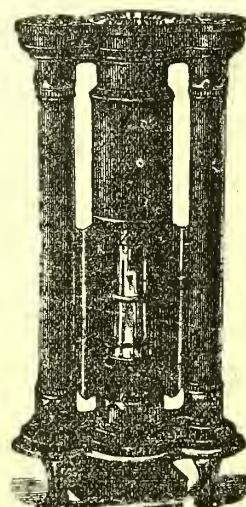
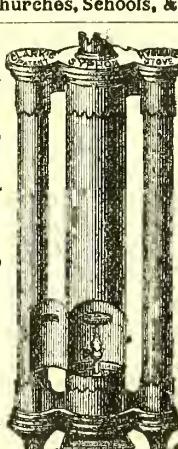
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Specially
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Also MICE POISON; cannot be excelled. In packets, 6d., 8d., and
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Buyers are invited to apply for prices to
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Critchley's Starch Gloss
Supplied in Original Bottles ready for
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Capsule solidified and unalterable, containing the dose for one-year old child (three
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ESSENTIAL OILS:—ASPIG, GERANIUM, LAVENDER, PEPPERMINT, NEROLI
BIGARADE, PETIT-GRAIN B'GARADE, ROSEMARY, THYME.
OLIVE OIL FOR TABLE USE.
Eau de Cologne, Toilet Water, Dentifrice Water, Extract of Quinqua,
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Spirituous Essences of Fruits.

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FINE PERFUMERY AND TOILET SOAPS,
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FIRST PRIZES AWARDED AT EVERY EXHIBITION.
Large Gold Medal at Nizza, 1884. LARGE GOLD MEDAL, with Special Mention, at
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SPECIALITY.—Essences, Toilet Waters, Extraits and Soaps à la
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KOLA WINE, 3/6.
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KOLATINA, or KOLA PASTE, 1/2, 3/6.
KOLA CHOCOLATE, 1/2, 3/6.
KOLA COCOA, 1/6, 2/6, and 5/6.
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KOLA CORDIAL, 2/9 and 4/6.
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When ordering through Wholesale Houses, please specify "CHRISTY'S" the
ORIGINAL INTRODUCERS OF ALL Kola preparations.
THOMAS CHRISTY & CO., 25 LIME STREET, LONDON, E.C.

Exterminate your "Lost Siphon" account, Banish the "Deposit" system,
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THE "PERFECT" SIPHON REGISTER
Write for particulars, and copies on approval, to
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See "Chemist and Druggist," May 9th, pp. 655-6.

TRIUMPHANT SUCCESS OF
COOPER'S DIPPING POWDER
At the London Wool Sales for April,
Cooper Dipped Wools took 17 out of the first
18 places in the Price List.
WILLIAM COOPER & NEPHEWS, BERKHAMSTED.

WATERPROOF ACCOUCHEMENT SHEETS
Manufactured for the Patentee by
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Manufacturers of Antiseptic and Absorbent Lints, Cotton Wools, Gauzes,
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EXCELSIOR HERB OR BOTANIC BEER POWDER

MAKES THE LARGEST QUANTITY—THE BEST QUALITY.

It is the best and cheapest in the market; makes better drink than any fluid extract; no trouble making; a Sixpenny Box makes 2½ gallons, therefore the sales are before all others. Trade Price—One Gross of 2d. Boxes, 17s.; Two Gross, 16s. per gross, net; One Case of 18 2d. Boxes, 2s. 3d.; Two Cases, carriage paid, 4s. 6d. Also in 4d. and 6d. Boxes. The above is not a Ginger Beer Powder. Terms—Cash with Order. Retail Chemists, try this. Prepared only by

W. H. LAKIN, 16 New Bond Street, LEICESTER.



NEW 1d., 2d., & 3d. GOODS

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NOVELTY PERFUMES, &c.

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The only application which rapidly and effectually cures

ECZEMA AND ALL SKIN ERUPTIONS.

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